STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL	
	1. WELL NAME and NUMBER HOSS 907-31 SWD
2. TYPE OF WORK DRILL NEW WELL ◉ REENTER P&A WELL ○ DEEPEN WELL ○	**3. FIELD OR WILDCAT** NATURAL BUTTES
4. TYPE OF WELL Water Disposal Well Coalbed Methane Well: NO	**5. UNIT or COMMUNITIZATION AGREEMENT NAME** BADLANDS
6. NAME OF OPERATOR EOG Resources, Inc.	**7. OPERATOR PHONE** 435 781-9111
8. ADDRESS OF OPERATOR 1060 East Highway 40, Vernal, UT, 84078	**9. OPERATOR E-MAIL** kaylene_gardner@eogresources.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU61401	**11. MINERAL OWNERSHIP** FEDERAL ◉ INDIAN ○ STATE ○ FEE ○
	12. SURFACE OWNERSHIP FEDERAL ◉ INDIAN ○ STATE ○ FEE ○
13. NAME OF SURFACE OWNER (if box 12 = 'fee')	**14. SURFACE OWNER PHONE (if box 12 = 'fee')**
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')	**16. SURFACE OWNER E-MAIL (if box 12 = 'fee')**
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	**18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS** YES ○ (Submit Commingling Application) NO ◉
	19. SLANT VERTICAL ◉ DIRECTIONAL ○ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	339 FSL 1246 FEL	SESE	31	8.0 S	23.0 E	S
Top of Uppermost Producing Zone	339 FSL 1246 FEL	SESE	31	8.0 S	23.0 E	S
At Total Depth	339 FSL 1246 FEL	SESE	31	8.0 S	23.0 E	S

21. COUNTY UINTAH	**22. DISTANCE TO NEAREST LEASE LINE (Feet)** 336	**23. NUMBER OF ACRES IN DRILLING UNIT** 0
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 0	**26. PROPOSED DEPTH** MD: 2700 TVD: 2700
27. ELEVATION - GROUND LEVEL 4865	**28. BOND NUMBER** NM 2308	**29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE** 49-225

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORCANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ **WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER**	☑ **COMPLETE DRILLING PLAN**
☐ **AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)**	☐ **FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER**
☐ **DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)**	☑ **TOPOGRAPHICAL MAP**

NAME Kaylene Gardner	**TITLE** Regulatory Administrator	**PHONE** 435 781-9111
SIGNATURE	**DATE** 03/26/2009	**EMAIL** kaylene_gardner@eogresources.com

API NUMBER ASSIGNED 43047503010000	**APPROVAL**  Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	1800		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 ST&C	1800	36.0			

EIGHT POINT PLAN

HOSS 907-31 SWD
SE/SE, SEC. 31, T8S, R23E, S.L.B.&M.
UINTAH COUNTY, UTAH

1. & 2. ESTIMATED TOPS & ANTICIPATED OIL, GAS, & WATER ZONES:

FORMATION	TVD-RKB (ft)	Objective	Lithology	
Uinta FM	17			
Green River FM	2,022			
Mahogany Oil Shale Bed	2,707			Oil
TD	2,700			

EST. TD: 2,700' **Anticipated BHP: 1,165 Psig**

1. Fresh Waters may exist in the upper, approximately 1,000 ft ± of the Green River Formation, with top at about 2,000 ft ±.
2. Cement isolation is installed to surface of the well.
3. Surface Casing will be set at an depth 100' above Birds Nest estimated at 1800' ±

3. PRESSURE CONTROL EQUIPMENT: Rotating Head

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4. CASING PROGRAM:

CASING	Hole Size	Length	Size	WEIGHT	Grade	Thread	Rating Collapse	Factor Burst	Tensile
Conductor	17 ½"	0 – 45'	13 ⅜"	48.0#	H-40	STC	770 PSI	1730 PSI	322,000#
Surface	12 ¼"	0– 1800' KB±	9-⅝"	36.0#	J-55	STC	2020 PSI	3520 Psi	394,000#

All casing will be new or inspected.

5. Float Equipment:

EIGHT POINT PLAN

HOSS 907-31 SWD
SE/SE, SEC. 31, T8S, R23E, S.L.B.&M.
UINTAH COUNTY, UTAH

Conductor Hole Procedure (0 - 45' ± Below GL):

No Float Equipment

Surface Hole Procedure (Surface ± - 1600'):

Guide Shoe
Insert Float Collar (PDC drillable)
Centralizers: 1 – 5-10' above shoe, every collar for next 3 joints (4 total).

6. MUD PROGRAM:

Conductor Hole Procedure (0 - 45' ± below GL):

Air/air mist or aerated water

Surface Hole Procedure (Surface ± - TD):

Air/air mist or aerated water
Anticipated mud weight 8.4 depending on actual wellbore condition encountered while drilling.

Production Hole Procedure (Surface ± - TD):

Anticipated mud weight 8.4 depending on actual wellbore condition encountered while drilling.

7. VARIANCE REQUESTS:

7. VARIANCE REQUESTS:

Reference: **Onshore Oil and Gas Order No. 1**
Onshore Oil and Gas Order No. 2 – Section E: Special Drilling Operations

- EOG Resources, Inc. requests a variance to regulations requiring a straight run blooie line to be 100' in length. (Where possible, a straight run blooie line will be used).

- EOG Resources, Inc. requests a variance to regulations requiring the blooie line to be 100' in length. To reduce location excavation, the blooie line will be approximately 75' in length.

- EOG Resources, Inc. requests a variance to regulations, during air drilling operations only, requiring dedusting equipment. Dust during air drilling operations is controlled by water mist.

EIGHT POINT PLAN

HOSS 907-31 SWD
SE/SE, SEC. 31, T8S, R23E, S.L.B.&M.
UINTAH COUNTY, UTAH

- EOG Resources, Inc. requests a variance to regulations, during air drilling operations only, requiring an automatic igniter or continuous pilot light on the blooie line. (Not required on aerated water system).

- EOG Resources, Inc. requests a variance that compressors are located in the opposite direction from the blooie line a minimum of 100 feet from the well bore. (Air Compressors are rig mounted).

8. EVALUATION PROGRAM:

Logs: Mud log from base of surface casing to TD.
Open Hole Logs: Open Hole Logs will be run consisting of the following:
Schlumberger Platform Express: Open Hole Gamma Ray, Resistively, and Neutron Porosity CBL
Cased Hole Logs: **CBL**

9. CEMENT PROGRAM:

Conductor Hole Procedure (0-45' ± Below GL)

Lead: Ready Mix Cement

Top Out: Top out with Ready Mix Cement

Install 6' x 4' cellar ring, drill rat and mouse holes with spud rig.

Note: **Cement volumes will be calculated to bring cement to surface.**

Surface Hole Procedure (Surface to 1600' ±)

Lead: **427 sks** Class 'G' cement with 2% S1 (CaCl2) & 0.25 pps D29 (cellophane flakes), mixed at 15.8 ppg, 1.16 ft^3./sk., 4.95 gps water.

Top Out: **207 sks** Top out with Class 'G' cement with 2% S1 (CaCl2) in mix water, 15.8 ppg, 1.16ft^3./sk., 4.95 gps via 1" tubing set at 25' if needed.

Install 6' x 4' cellar ring, drill rat and mouse holes with spud rig.

Note: **Cement volumes will be calculated to bring cement to surface.**

10. ABNORMAL CONDITIONS:

EIGHT POINT PLAN

HOSS 907-31 SWD
SE/SE, SEC. 31, T8S, R23E, S.L.B.&M.
UINTAH COUNTY, UTAH

Surface Hole (Surface - 1600'±):

Lost circulation

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11. HAZARDOUS CHEMICALS:

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

12. Air Drilling Operations:

1. Main Air Compressors are 1250 CFM 350 psi with 2000 psi Boosters and are rig mounted.

2. Secondary Air Compressors are 1170 CFM 350 psi with 2000 psi Boosters and are rig mounted.

3. Minimum setting depth of conductor casing will be 60' GL or 10'± into competent formation, whichever is deeper, as determined by the EOG person in charge. Exceptions must be approved by an EOG drilling superintendent or manager.

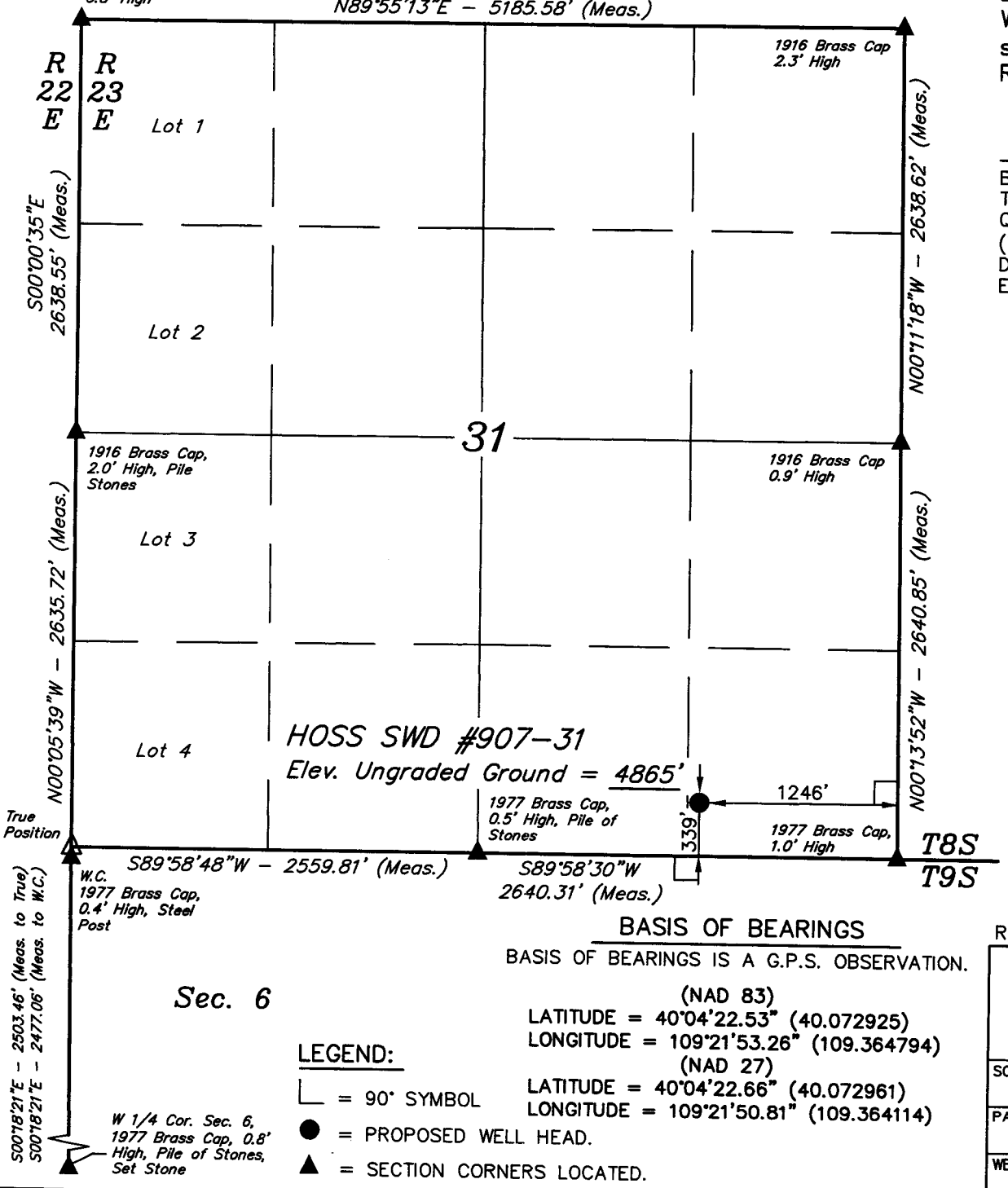
4. The diameter of the diverter flow line will be a minimum of 10" to help reduce back pressure on the well bore during uncontrolled flow.

5. Rat and Mouse hole drilling will occur only after surface casing has been set and cemented.

6. EOG Resources, Inc. will use a properly maintained and lubricated stripper head.

(Attachment: BOP Schematic Diagram)

T8S, R23E, S.L.B.&M.



BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

(NAD 83)
LATITUDE = 40°04'22.53" (40.072925)
LONGITUDE = 109°21'53.26" (109.364794)

(NAD 27)
LATITUDE = 40°04'22.66" (40.072961)
LONGITUDE = 109°21'50.81" (109.364114)

LEGEND:

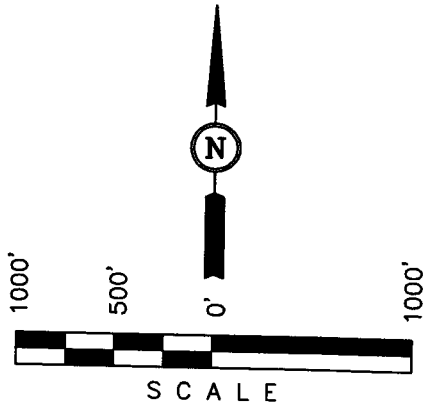
└ = 90° SYMBOL
● = PROPOSED WELL HEAD.
▲ = SECTION CORNERS LOCATED.

EOG RESOURCES, INC.

Well location, HOSS SWD #907-31, located as shown in the SE 1/4 SE 1/4, of Section 31, T8S, R23E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 05-11-07

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE: 1" = 1000'	DATE SURVEYED: 04-19-07	DATE DRAWN: 04-25-07
PARTY: L.K. J.A. S.L.	REFERENCES: G.L.O. PLAT	
WEATHER: HOT	FILE: EOG RESOURCES, INC.	

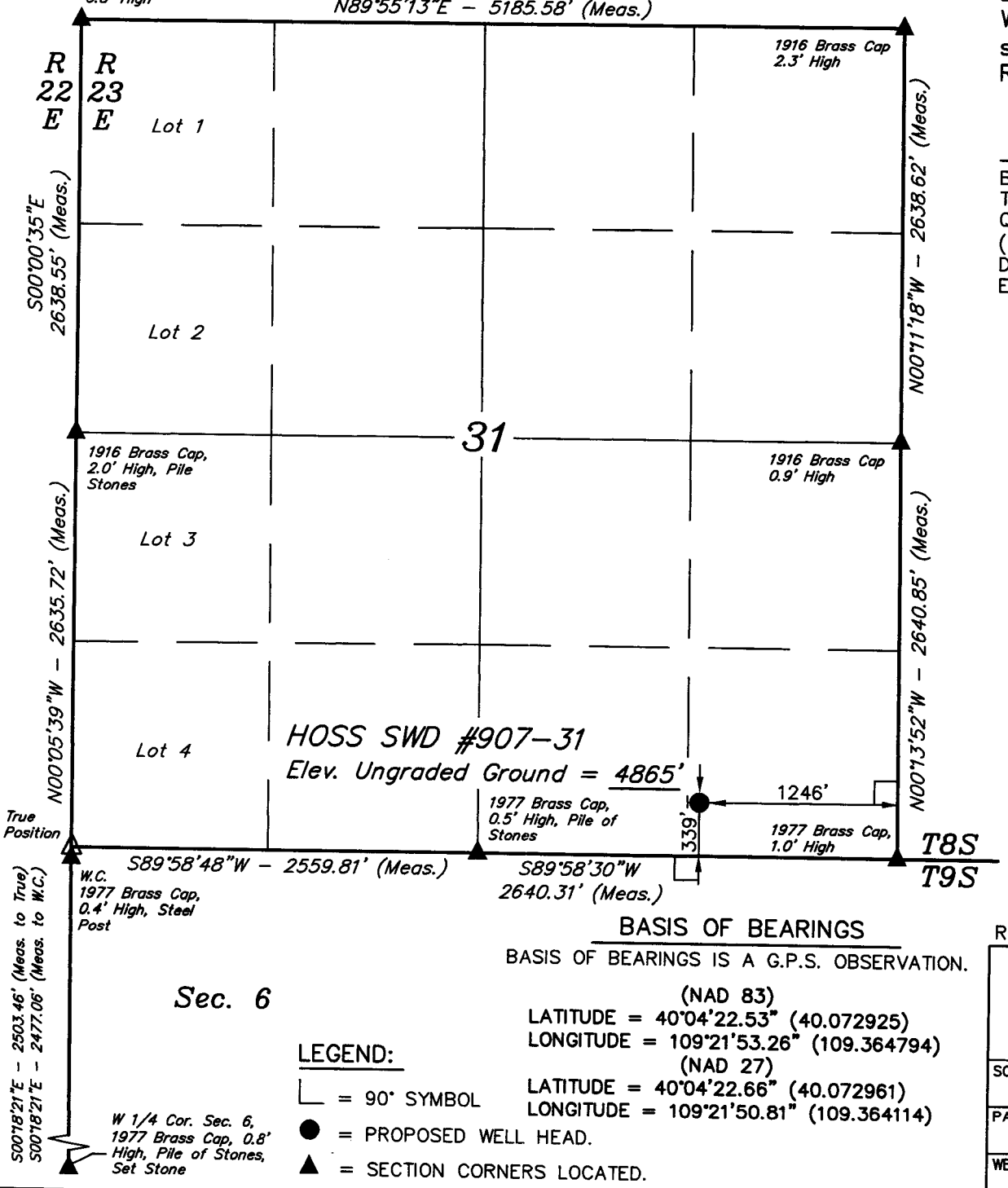
API Well No: 43047503010000

EOG RESOURCES, INC.
HOSS SWD #907-31
SECTION 31, T8S, R23E, S.L.B.&M.

PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.9 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 19.2 MILES ON STATE HIGHWAY 45 TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 8.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 4.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 240' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 38.8 MILES.

T8S, R23E, S.L.B.&M.



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EOG RESOURCES, INC.

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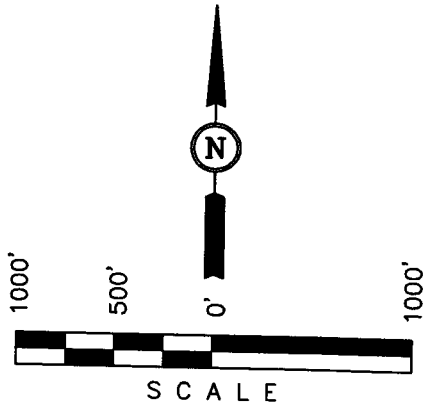

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REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 05-11-07

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE: 1" = 1000'	DATE SURVEYED: 04-19-07	DATE DRAWN: 04-25-07
PARTY: L.K. J.A. S.L.	REFERENCES: G.L.O. PLAT	
WEATHER: HOT	FILE: EOG RESOURCES, INC.	

API Well No: 43047503010000

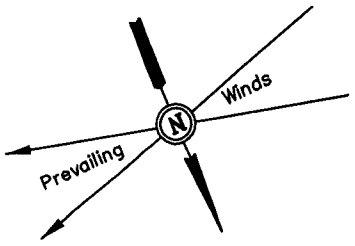
'APIWellNo:43047503010000'

EOG RESOURCES, INC.

LOCATION LAYOUT FOR

HOSS SWD #907-31
SECTION 31, T8S, R23E, S.L.B.&M.
339' FSL 1246' FEL

FIGURE #1



SCALE: 1" = 50'
DATE: 04-25-07
Drawn By: S.L.
REVISED: 05-11-07

Approx. Toe of Fill Slope

C-0.4' El. 65.8'
C-0.5' El. 65.9'
F-1.6' El. 63.8'
Sta. 2+00
Approx. Top of Cut Slope
CATWALK
100'
PIPE RACKS
F-0.3' El. 65.1'
F-0.3' El. 65.1'
F-1.3' El. 64.1'
NOTE:
Flare Pit is to be located a min. of 100' from the Well Head.
FLARE PIT
RESERVE PITS (12' Deep)
Total Pit Capacity W/2' of Freeboard = 4,210 Bbls.±
Total Pit Volume = 1,210 Cu. Yds
C-13.4' El. 66.8' (btm. pit)
50'
10' BENCH
100'
1:1 1/2 SLOPE
35'
RIG
100' Sta. 1+00
MUD TANKS
WATER
TRAILER
PUMP
MUD SHED
100'
Sta. 0+50
TOILET
FUEL
HOPPER
POWER
TOOLS
FUEL
TRASH
STORAGE TANK
Sta. 0+00
Topsoil Stockpile
Reserve Pit Backfill & Spoils Stockpile
F-0.3' El. 65.1'
(btm. pit)
C-16.9' El. 70.3'
C-3.3' El. 68.7'
C-2.1' El. 67.5'
A
B
1
2
3
4
5
6
7
8

NOTE:
Earthwork Calculations Require a Fill of 0.3' @ the Location Stake For Balance. All Fill is to be Compacted to a Minimum of 95% of the Maximum Dry Density Obtained by AASHTO Method t-99.

Proposed Access Road

Elev. Ungraded Ground at Location Stake = 4865.1'
Elev. Graded Ground at Location Stake = 4865.4'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

'APIWellNo:43047503010000'

EOG RESOURCES, INC.

TYPICAL CROSS SECTIONS FOR

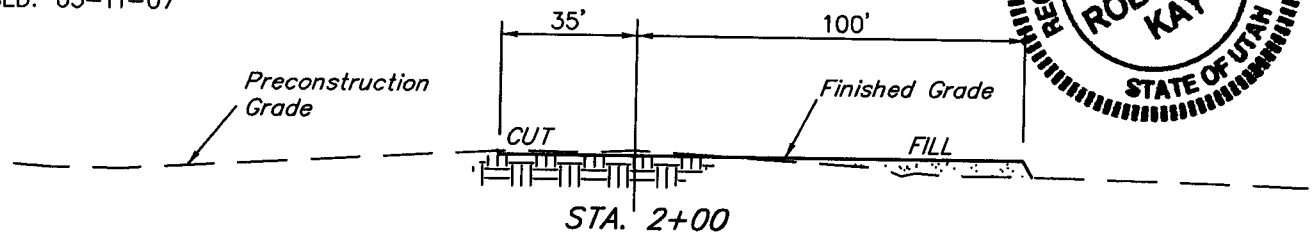
HOSS SWD #907-31
SECTION 31, T8S, R23E, S.L.B.&M.
339' FSL 1246' FEL

FIGURE #2

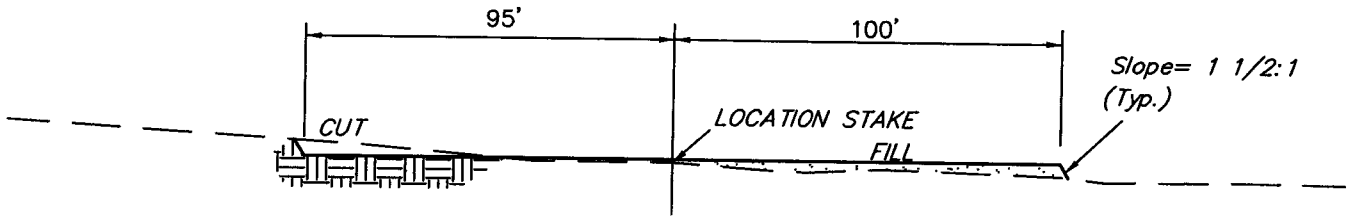
1" = 20'
X-Section Scale
1" = 50'

DATE: 04-25-07
Drawn By: S.L.
REVISED: 05-11-07

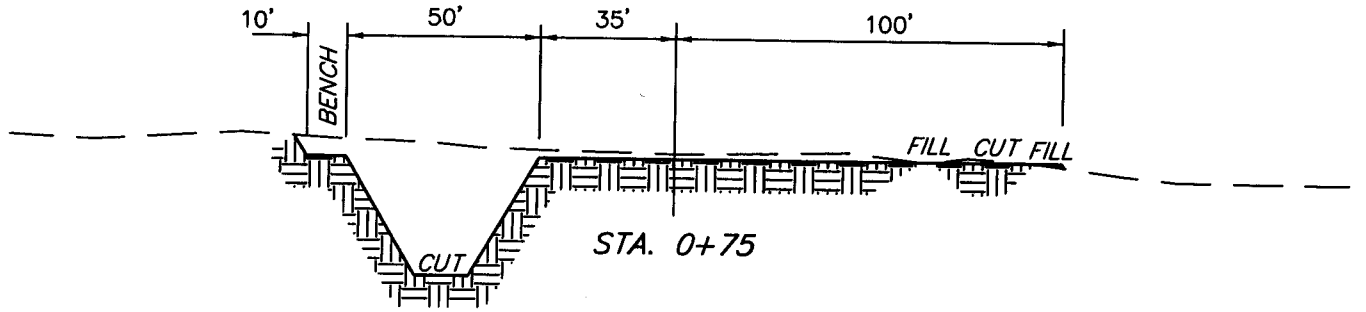
REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH



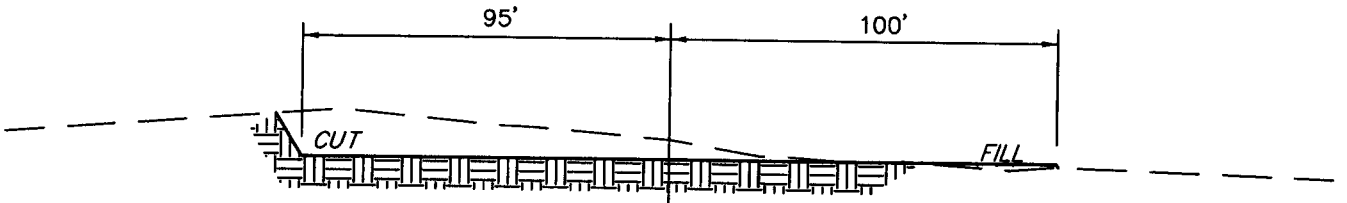
STA. 2+00



STA. 1+00



STA. 0+75



STA. 0+00

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE YARDAGES

(6") Topsoil Stripping	= 690	Cu. Yds.
Remaining Location	= 1,780	Cu. Yds.
TOTAL CUT	= 2,470	CU.YDS.
FILL	= 1,170	CU.YDS.

EXCESS MATERIAL	= 1,300	Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,300	Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 0	Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

'APIWellNo:43047503010000'

EOG RESOURCES, INC.

HOSS SWD #907-31

LOCATED IN UINTAH COUNTY, UTAH
SECTION 31, T8S, R23E, S.L.B.&M.

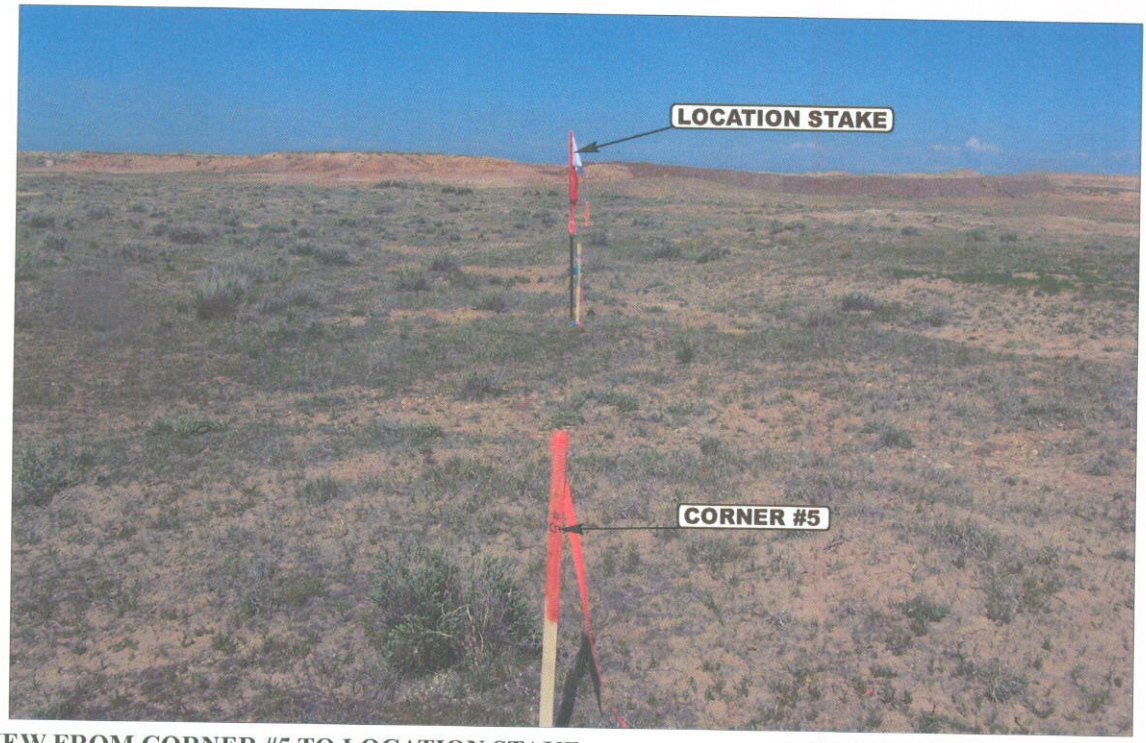


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

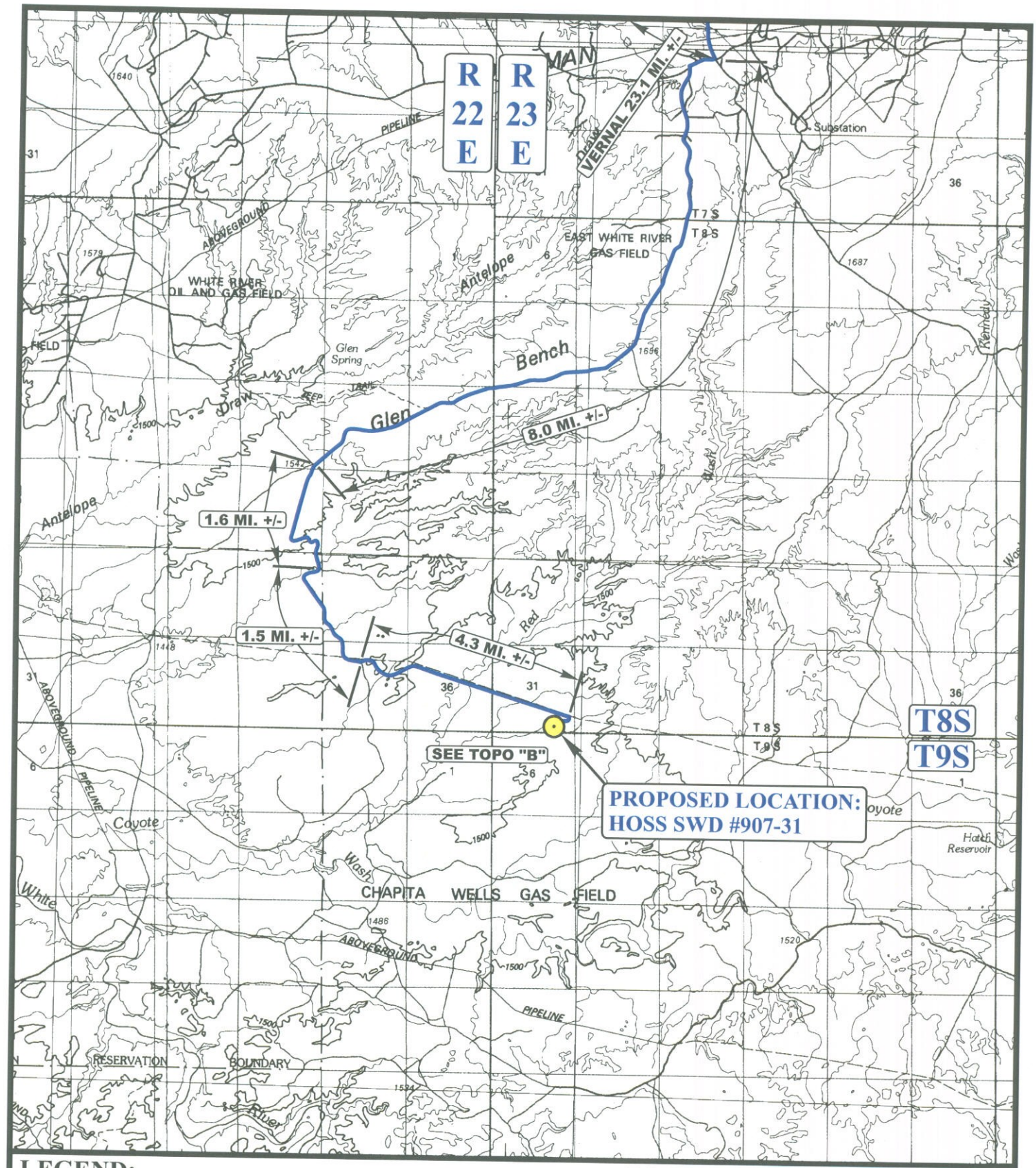
CAMERA ANGLE: WESTERLY

- Since 1964 -

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS	04 MONTH	26 DAY	07 YEAR	PHOTO
TAKEN BY: L.K.	DRAWN BY: C.P.	REVISED: 05-12-07		

'APIWellNo:43047503010000'



LEGEND:

PROPOSED LOCATION

N

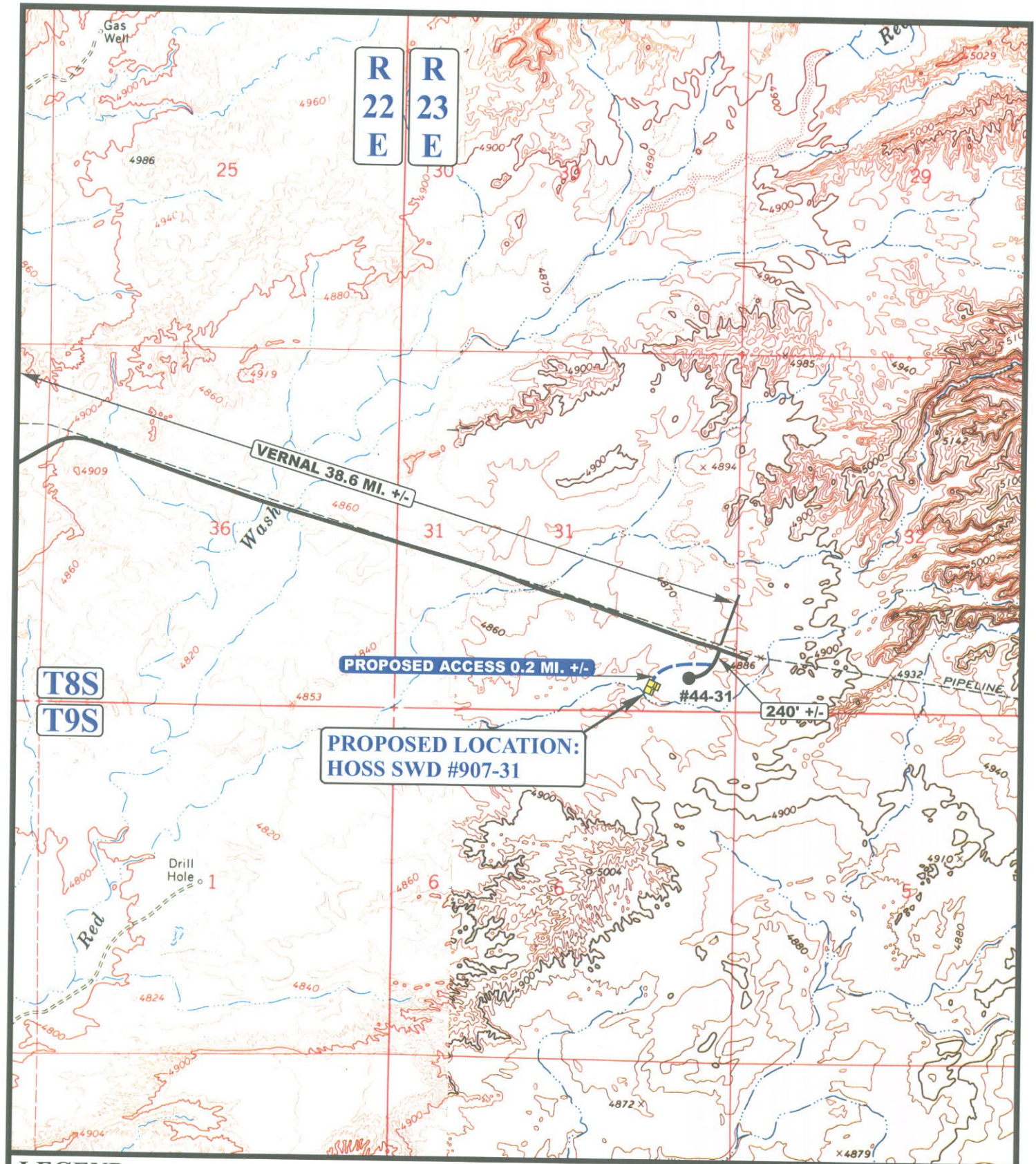
EOG RESOURCES, INC.

HOSS SWD #907-31
SECTION 31, T8S, R23E, S.L.B.&M.
339' FSL 1246' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	04 MONTH	26 DAY	07 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: C.P.	REVISED: 05-12-07		

'APIWellNo:43047503010000'



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

N

EOG RESOURCES, INC.

HOSS SWD #907-31
SECTION 31, T8S, R23E, S.L.B.&M.
339' FSL 1246' FEL

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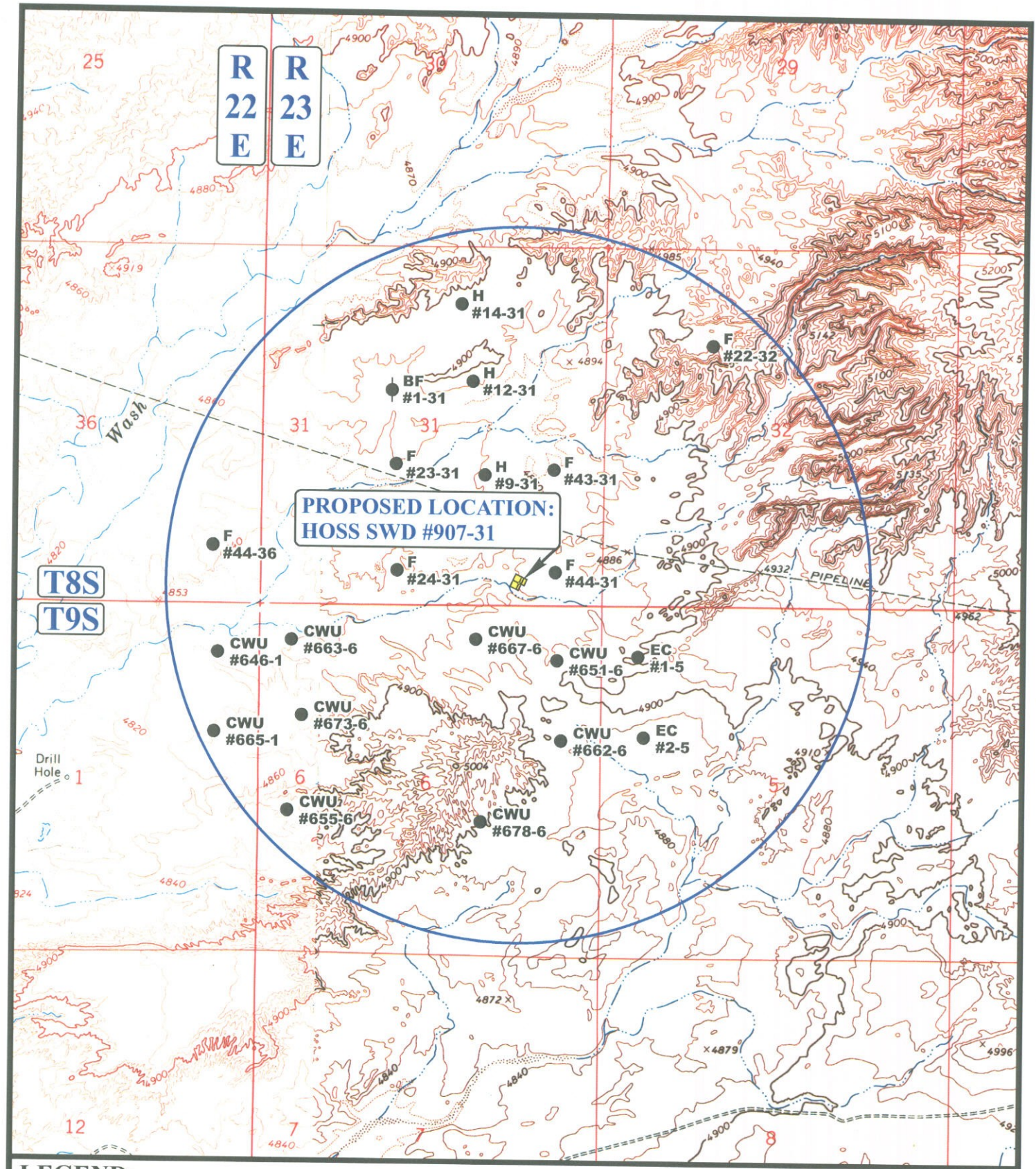
TOPOGRAPHIC MAP	04 MONTH	26 DAY	07 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 05-12-07		

'APIWellNo:43047503010000'



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

EOG RESOURCES, INC.

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339' FSL 1246' FEL

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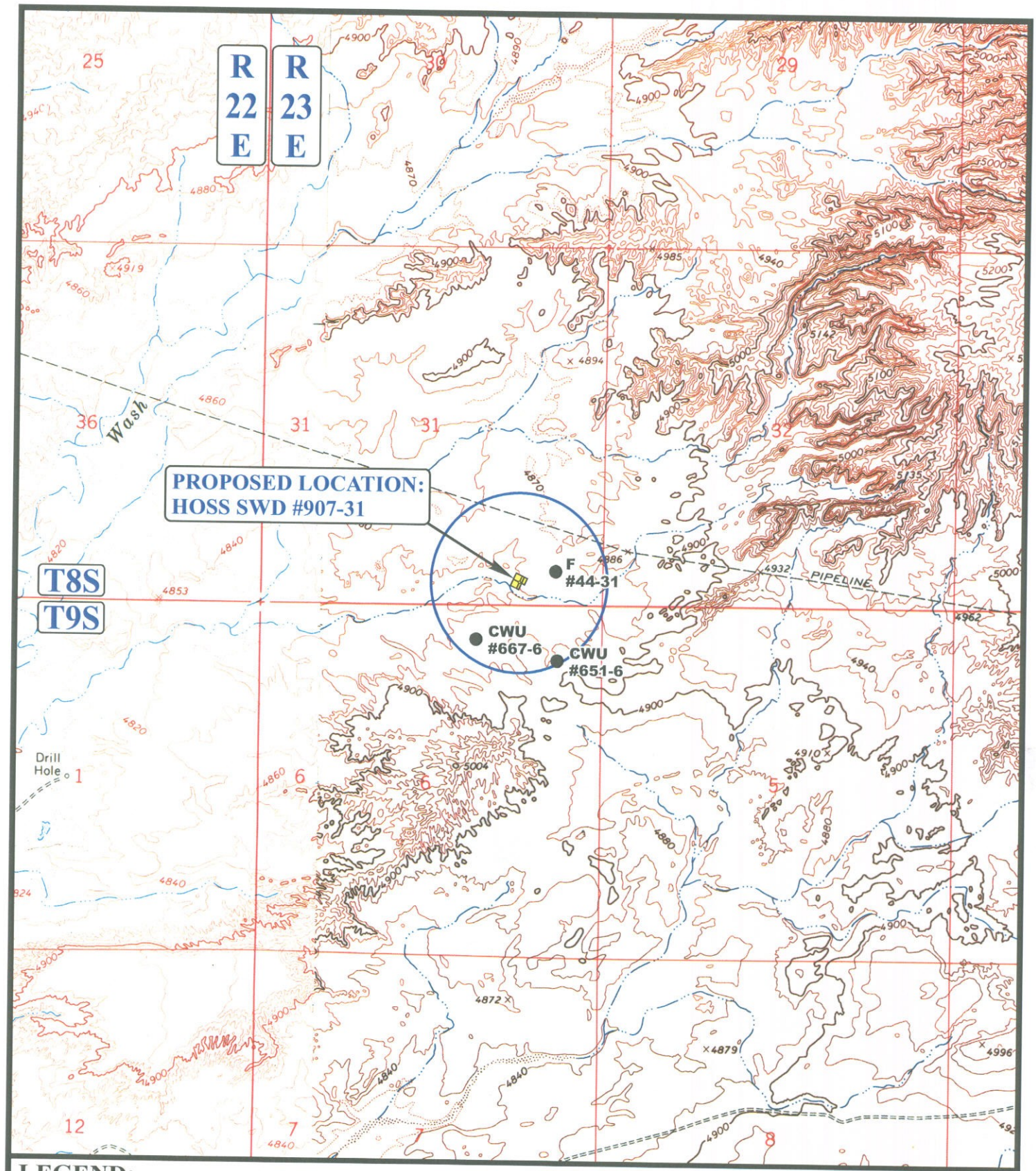
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	04 MONTH	26 DAY	07 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 05-12-07		

'APIWellNo:43047503010000'



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

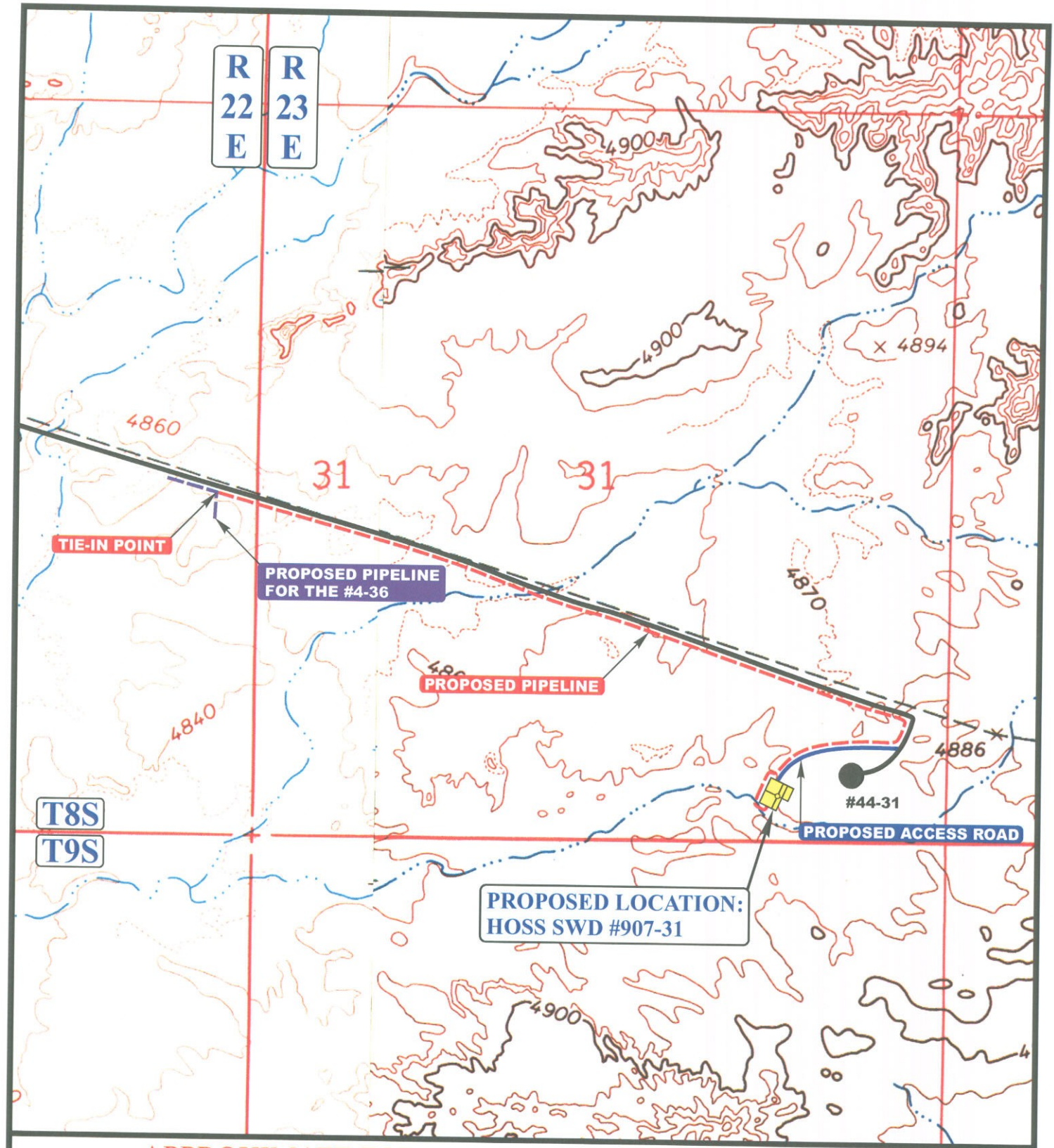
EOG RESOURCES, INC.

HOSS SWD #907-31
SECTION 31, T8S, R23E, S.L.B.&M.
339' FSL 1246' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	12 DAY	07 YEAR	C1 TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00		

'APIWellNo:43047503010000'



APPROXIMATE TOTAL PIPELINE DISTANCE = 7,017' +/-

LEGEND:

PROPOSED ACCESS ROAD

PROPOSED PIPELINE

PROPOSED PIPELINE (SERVICING OTHER WELLS)

N

EOG RESOURCES, INC.

HOSS SWD #907-31
SECTION 31, T8S, R23E, S.L.B.&M.
339' FSL 1246' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	04 MONTH	26 DAY	07 YEAR	D TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 05-12-07		

CONSTRUCTION, OPERATION AND MAINTENANCE PLAN OF DEVELOPMENT

HOSS WATER DISPOSAL FACILITY WELLPADS AND PIPELINES

EOG Resources, Inc., hereby applies under Section 28 of the Act of February 25, 1920 (41 state. 449), (30 U.S.C. Section 185) as amended by the Act of November 16, 1973, (87 Stat. 576) and requests that this APD serve as the construction, operations and maintenance plan for the right-of-way application for the pipeline on federal lands. A 30-year right-of-way term is requested.

1. PURPOSE AND NEED FOR ROW GRANT:

This right-of-way grant will allow placement of six (6) water disposal wells and associated equipment within Section 31, T8S, R23E, and Section 36, T8S, R22E, surface owned by the Federal Government.

EOG Resources, Inc. is requesting authorization to drill and operate six (6) water disposal wells each individual well pad encompassing an area approximately 200' x 185' a permanent right-of-way of approximately 0.85 acres per well pad. A permanent pipeline right-of-way for approximately 15,000' in length and 20' in width is requested, with a temporary, 30-day, pipeline right-of-way for construction purposes is requested.

EOG Resources, Inc. respectfully requests a right-of-way term of 30-years.

2. FACILITY DESIGN FACTORS:

Six (6) water disposal wells will be attached to Hoss Water Disposal Facility: Hoss 901-36 within Section 36, T8S, R22E Federal Lease UTU56960, Hoss 904-36 within Section 36, T8S, R22E Federal Lease UTU56960, Hoss 905-31within Section 31, T8S, R23E Federal Lease UTU 61401, Hoss 906-31 within Section 31, T8S, R23E Federal Lease UTU 61401, and Hoss 907-31 within Section 31, T8S, R23E Federal Lease UTU 61401.

Equipment to be included on each location will consist of a wellhead, piping and attaching material and one (1) 6' x 8' building. Water will be disposed of from the Existing Hoss 64-36 location and piped, via buried pipeline, to one of the six referenced injection wells for underground disposal. Facilities located on the Hoss 64-36 will consist of a building to house all disposal equipment,

The facility will be engineered to operate as a Normally Unmanned Installation (NUI) completed with instrumentation and controls necessary to remotely monitor and operate the facility in a safe and effective manner.

Enclosed please find a set of plats, showing location photos, section plat, 1:1,000,000 topo maps 1-50" pad layout, cut and fill sheet, and site diagram.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within 6 months of installation. **All existing facilities will be painted with Carlsbad Canyon.** Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded.

3. GOVERNMENTAL AGENCY INVOLVEMENT:

An application is being pursued from EPA authorizing underground injection. Once the permit is authorized a copy will be submitted to the Vernal BLM Field Office.

Applications for Permit to Drill will be submitted to the Utah Department of Oil Gas and Mining for each injection well.

4. RIGHT-OF-WAY LOCATION:

Attached is a 7.5 minute topo with Township, Range and Sections of the road route.

The proposed well pad for Hoss 901-36 SWD is located within the NESE of Section 36-T8S-R22E. The proposed well pad for Hoss 903-36 SWD is located within the NWSE of Section 36-T8S-R33E. The proposed well pad for Hoss 904-36 SWD is located within the NESW of Section 36-T8S-R22E. The proposed well pad for Hoss 905-31 SWD is located within the SESW of Section 31-T8S-R23E. The proposed well pad for Hoss 906-31 SWD is located within the NESE of Section 31-T8S-R23E. The proposed well pad for Hoss 907-31 is located within the SWSE of Section 31-T8S-R23E.

Low water crossing and CMP's shall be installed as deemed necessary.

5. RESOURCES VALUES AND ENVIRONMENTAL CONCERNS:

Resource Values:

Archaeological: A Class III Cultural Resources Inventory of the location pad(s), access road(s) and pipeline route(s) have been completed and submitted by Montogomery Archeological.

Hoss 901-36 Report No. MOAC 07-180 Submitted 7/4/2007
Hoss 903-36 Report No. MOAC 07-180 Submitted 7/4/2007
Hoss 904-36 Report No. MOAC 07-180 Submitted 7/4/2007
Hoss 905-31 Report No. MOAC 07-179 Submitted 7/3/2007
Hoss 906-31 Report No. MOAC 07-179 Submitted 7/3/2007
Hoss 907-31 Report No. MOAC 07-179 Submitted 7/3/2007

Paleontological Surveys of the location pads access road(s) and pipeline route(s) have been completed and submitted by Intermountain Paleontological Consultants.

Hoss 901-36 Report No. IPC 07-103 Submitted 5/08/2007
Hoss 903-36 Report No. IPC 07-103 Submitted 5/08/2007
Hoss 904-36 Report No. IPC 07-103 Submitted 5/08/2007
Hoss 905-31 Report No. IPC 07-102 Submitted 5/30/2007
Hoss 906-31 Report No. IPC 07-102 Submitted 5/30/2007
Hoss 907-31 Report No. IPC 07-102 Submitted 5/30/2007

Environment Concerns:

Visual Resources: This project will be visual mostly when drilling and completion is taking place.

Water Quality: The proposed project does not cross any perennial streams and should not affect surface or ground water quality.

6. CONSTRUCTION OF THE FACILITY:

Schedule: Construction will begin once the ROW, and underground injection permit from EPA is approved.

Pre-Construction: Prior to construction the pad will be staked and flagged by professional surveyors.

EOG Resources, Inc. is authorized to operate in the State of Utah with proper documentation filed in the appropriate federal, state and regional offices. EOG has demonstrated its financial and technical capabilities to construct, operate, and maintain previous water disposal facilities.

EOG Resources, Inc. shall comply with all federal, state and local laws applicable to this project as they relate to public health, safety and environmental protection, construction, operation and maintenance.

All safety measures have been considered. EOG Resources, Inc. shall have a representative available during all phases of construction. This individual will oversee construction activities to ensure that all work is performed in accordance with the BLM approved plan of operations.

EOG Resources, Inc. will provide a 48-hour pre-construction notification to BLM.

Construction: EOG Resources, Inc. will confine all travel to existing access road rights-of-way.

Construction activities will not occur when deep frost is present in the ground; nor will frozed dirt be utilized for construction purposes. Additionally, no construction activity will be

conducted with saturated soil material or when significant watershed damage (rutting, extensive sheet soil erosion, formation of rill/gullies, etc.) is likely to occur.

The top (6) inches of topsoil, as a minimum, will be salvaged and set aside for reclamation. The soil will not be intermixed with any spoil the will come out of the trenched material.

The construction work will include the use of equipment for delivery and staging of well drilling and completion equipment, as well as surface piping and equipment, blading and trenching, fusion welding
New or reconstructed roads will be centerlined – flagged at time of location staking. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, Fourth Edition and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction.

The road shall be constructed/upgraded to meet the standards of the anticipated traffic flow and all-weather road requirements. Construction/upgrading shall include ditching, draining, graveling, crowning, and capping the roadbed as necessary to provide a well-constructed, safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 40-foot right-of-way will not be allowed. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the roadbed block the drainages. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around then avoided.

As operator, EOG Resources, Inc. shall be responsible for all maintenance on cattleguards, or gates associated with this oil and/or gas operation.

Traveling off the 40-foot right-of-way will not be allowed. The access road and associated drainage structures will be constructed and maintained in accordance with road guidelines contained in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, Fourth Edition, and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction. During the drilling and production phase of operations, the road surface and shoulders will be kept in a safe and useable condition and drainage ditches and culverts will be kept clear and free flowing.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within 6 months of installation. **All facilities will be painted with Carlsbad Canyon or Covert Green.** Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded.

7. SOURCE OF CONSTRUCTION MATERIALS:

A. All construction material for this pipeline will be of native borrow and soil accumulated during the construction of the location.

B. No mineral materials will be required.

EOG Resources, Inc. maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be found at the site may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/ stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous and EHS and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of the well. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing or completion of the well.

8. PIPELINE DESIGN FACTORS:

1. Proposed pipeline(s) will transport produced water.

2. Proposed pipeline will be a 4" OD steel, welded buried pipeline.

The proposed pipeline length for Hoss 901-36 is approximately 747' in length by 20' in width. The proposed pipeline leaves the eastern edge of the proposed well pad proceeding westerly then northerly for an approximate distance of 747', tieing into existing Hoss 64-36 location and Hoss SWD facility.

The proposed pipeline length for Hoss 903-36 is approximately 697' in length by 20' in width. The proposed pipeline leaves the northern edge of the proposed well pad proceeding northerly for an approximate distance of 697', tieing into the proposed pipeline for Hoss 904-36.

The proposed pipeline length for Hoss 904-36 is approximately 4903' in length by 20' in width. The proposed pipeline leaves the northern edge of the proposed well pad proceeding northerly then easterly for an approximate distance of 4903', tieing into the existing pipeline for Hoss 64-36.

The proposed pipeline length for Hoss 905-31is approximately 939' in length by 20'

in width. The proposed pipeline leaves the western edge of the proposed well pad proceeding northerly for an approximate distance of 939', tieing into the proposed pipeline for Hoss 907-31.

The proposed pipeline length for Hoss 906-31 is approximately 214' in length by 20' in width. The proposed pipeline leaves the western edge of the proposed well pad proceeding southerly for an approximate distance of 214', tieing into the proposed pipeline for Hoss 906-31.

The proposed pipeline length for Hoss 907-31 is approximately 7500' in length by 20' in width. The proposed pipeline leaves the southern edge of the proposed well pad proceeding westerly for an approximate distance of 7500', tieing into the existing pipeline for Hoss 64-36.

A permanent right-of-way width of 20' with a 30 day temporary right-of-way width of 40' is requested.

9. RECLAMATION FACTORS:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with CFR 3162.7-1.

If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

All reclamation shall be in accordance with guidelines set forth in the Fourth Edition of BLM/USFSS Surface Operating Standards for Oil and Gas Exploration and Development.

Any areas that are not needed for operations of the injection wells right-of-way will be contoured to the native terrain, and topsoil will be distributed at a minimum of six inches thick with the BLM prescribed seed mixture.

The reclaimed area will be compacted to an acceptable level to ensure appropriate settling of soils as well as providing for a suitable seedbed.

Seeding will occur during spring or late fall seasons when ground frost is not present, but soil temperatures are within the acceptable limitations for germination.

Water bars will be constructed in any sloped areas where there is potential erosion.

Rip Rap and silt traps will be installed at/in drainages where seen fit and/or upon the request of BLM.

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment and the BLM will attach the appropriated surface rehabilitation conditions of approval.

Seed Mixture	Drilled Rate (lbs./acre PLS*)
Fourwing Saltbush	2.0
Indian Ricegrass	2.0
Needle and Threadgrass	2.0
HyCrest Wheatgrass	1.0
Scarlet Globe Mallow	1.0

*Pure live seed (PLS) formula: percent of purity of seed mixture times percent germination of seed mixture equals portion of seed mixture that is PLS.

Pipeline Abandonment

At such time as the pipeline is abandoned, the operator will submit a subsequent report of abandonment and the BLM will attach the appropriated surface rehabilitation conditions of approval.

10. WELL SITE LAYOUT:

A. Refer to attached well site plat for related topography cuts and fills and cross sections.

B. Refer to the attached well site plat for rig layout and soil material stockpile location as approved on On-site.

C. Refer to attached well site plat for rig orientation, parking areas, and access road.

11. SURFACE OWNERSHIP:

Surface ownership of the proposed well site, access road, and pipeline route is as follows:

Bureau of Land Management

12. OTHER INFORMATION:

A. EOG Resources, Inc. will inform all persons in the area who are associated with this project that they are subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator will immediately stop work that might further disturb such materials, and contact the Authorized Officer. Within five working days the Authorized Officer will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;

- The mitigation measures the operator will likely have to undertake before the site can be used.

- A time frame for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.

If the operator wished, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation and stabilization of the exposed materials that may be required. Otherwise, the operator will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that required mitigation has been completed, the operator will then be allowed to resume construction.

B. As operator, EOG Resources, Inc. will control noxious weeds along Right-of-Ways for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds will be obtained from the BLM administered land, a Pesticide Use proposal shall be submitted, and given approval, prior to the application or herbicides or other pesticides or possible hazardous chemicals.

C. Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on BLM lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities. (The BLM does not seek to compete with private industry. There are commercial facilities available for stacking and storing drilling rigs.)

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice of Lessees. The operator is fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

If the existing access road, proposed access road, and proposed pad are dry during construction, drilling, and completion activities, water will be applied, as needed, to help facilitate compaction during construction and to minimize soil loss as a result of wind erosion.

A cultural resources survey has been conducted and submitted by Montgomery Archaeological Consultants and paleontology survey will be conducted and submitted by Montgomery Archaeological Consultants.

LESSEE OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:

PERMITTING AGENT
Kaylene R. Gardner
EOG Resources, Inc.
P.O. Box 1815
Vernal, Ut 84078
(435) 781-9111

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

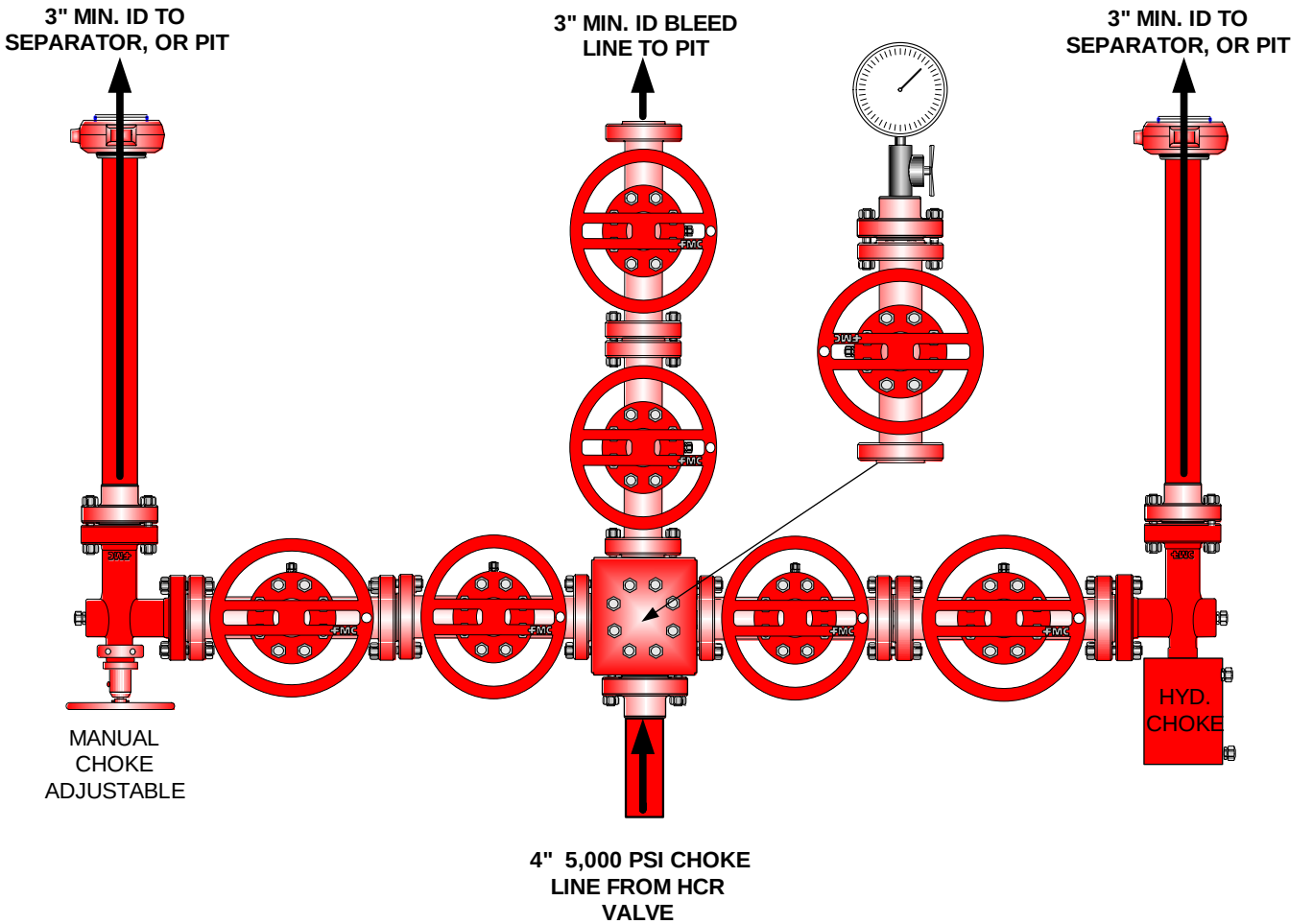
CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by EOG Resources, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Please be advised that EOG Resources, Inc. is considered to be the operator of the Hoss 901-36SWD, Hoss 903-36SWD, Hoss 904-36SWD, Hoss 905-31SWD, Hoss 906-31SWD, Hoss 907-31SWD and Hoss 64-36 Wells, located within Section 31, T8S, R23E, and Section 36, T8S, R22E, Uintah County, Utah; Statel land and minerals; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is under Bond # NM 2308.

November 12, 2007 _____
Date Kaylene R. Gardner, Lead Regulatory Assistant

EOG RESOURCES CHOKE MANIFOLD CONFIGURATION W/ 5,000 PSI WP VALVES

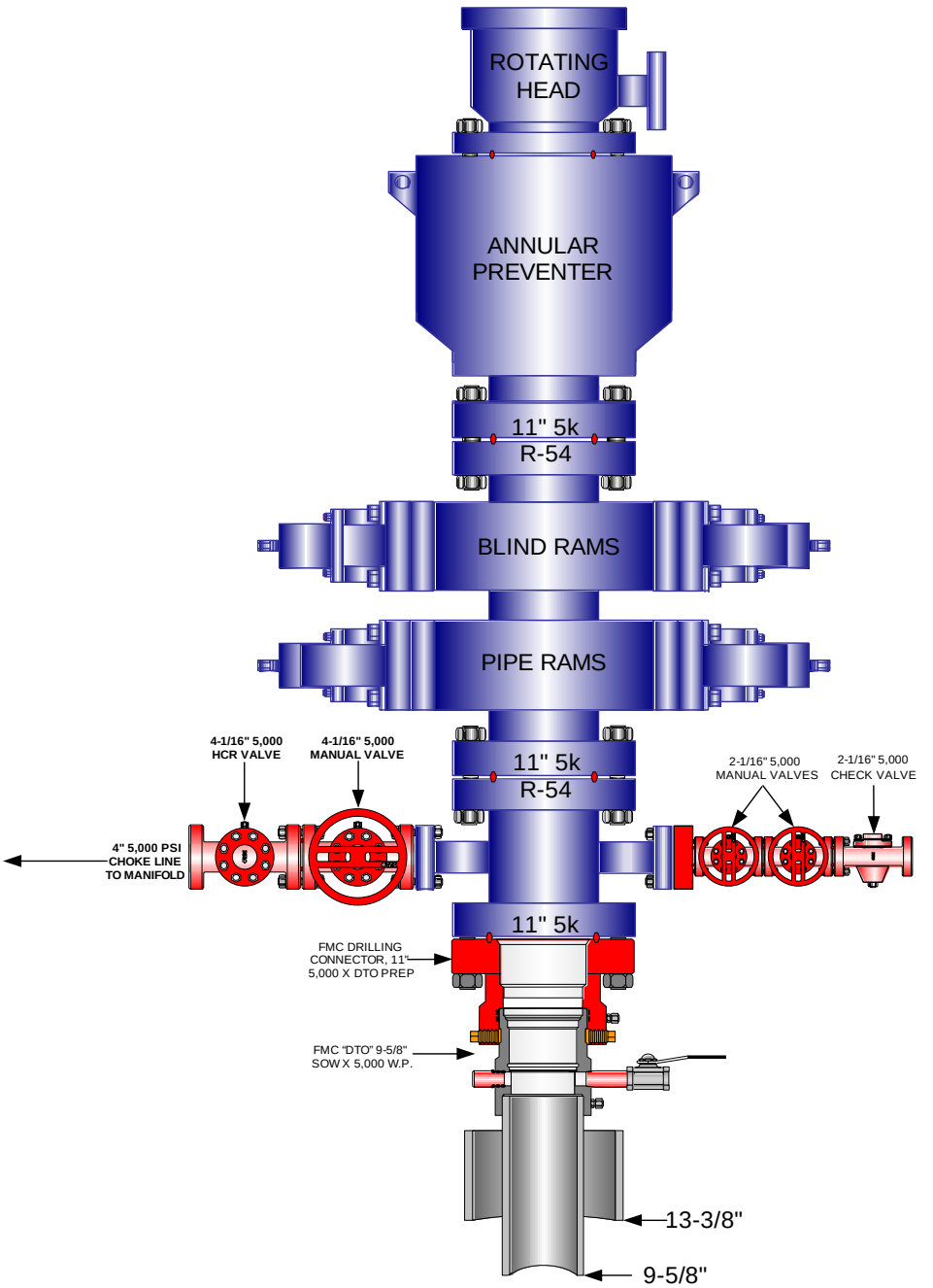


Testing Procedure:

1. BOP will be tested with a professional tester to conform to Onshore Order #2.
2. Blind and Pipe rams will be tested to rated working pressure, 5,000 psi.
3. Annular Preventer will be tested to 50% working pressure, 2,500 psi.
   Casing will be tested to 0.22 psi / ft. or 1,500 psi. Not to exceed 70% of burst strength, whichever is greater.
4. All lines subject to well pressure will be tested to the same pressure as blind and pipe rams.
5. All BOPE specifications and configurations will meet Onshore Order #2 requirements.

’APIWellNo:43047503010000’

EOG RESOURCES 11" 5,000 PSI W.P. BOP CONFIGURATION



'APIWellNo:43047503010000'

EOG Resources, Inc.
1060 E Hwy 40
Vernal, Utah 84078

March 24, 2009

Mr. Brad Hill
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84116

RE: Hoss 907-31 SWD

Dear Brad:

EOG Resources, Inc. will not establish hydrocarbon production from the Hoss 907-31 SWD well bore. The proposed well bore will be used for the disposal of produced water as authorized by The Environmental Protection Agency. Please contact me at (435) 781-9111 if you have any additional questions.

Sincerely,

Kaylene R. Gardner
Regulatory Administrator

cc: File

API Number: 4304750301

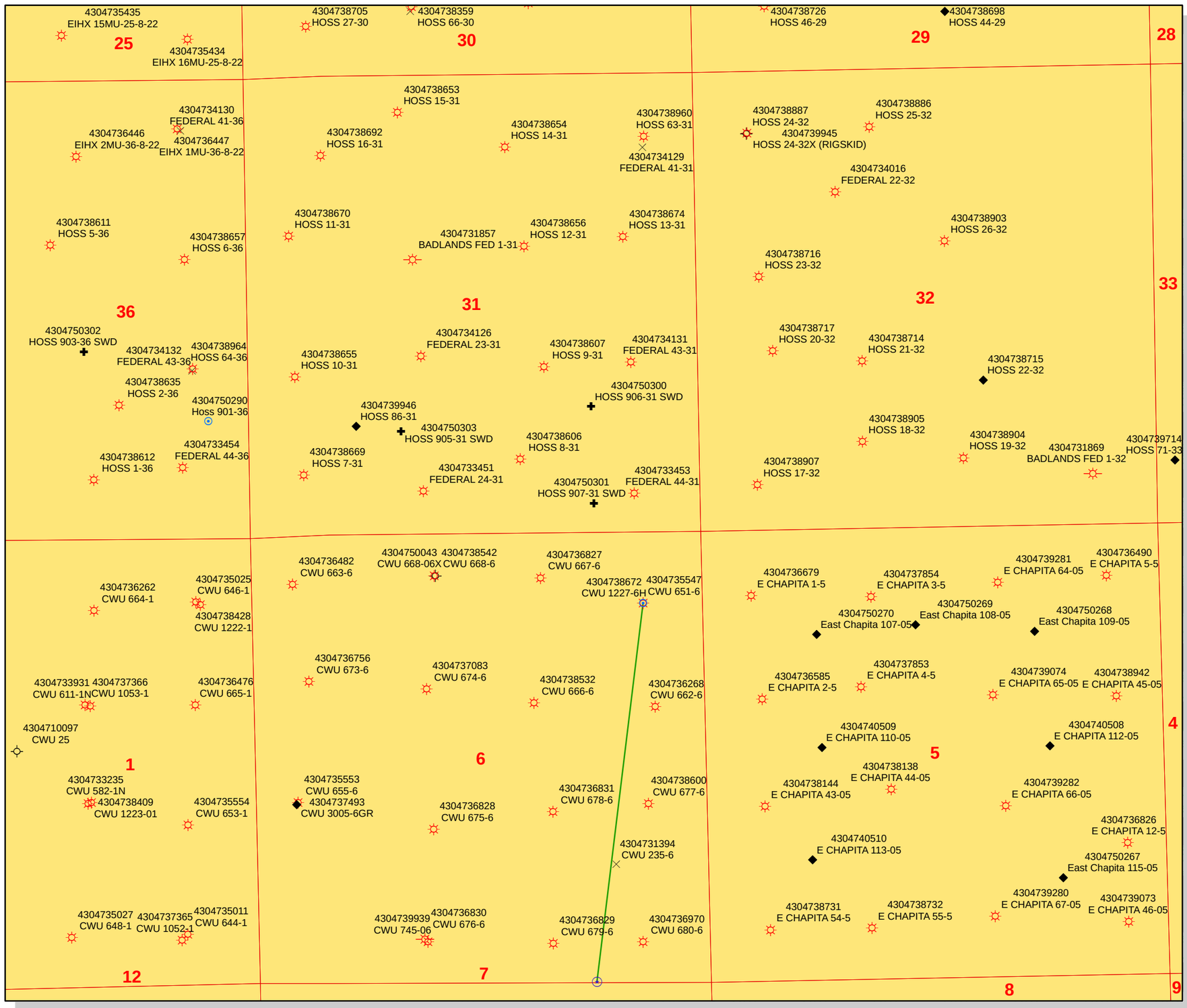
Well Name: HOSS 907-31 SWD

Township 08.0 S Range 23.0 E Section 31

Meridian: SLBM

Operator: EOG RESOURCES, INC.

Map Prepared:
Map Produced by Diana Mason



Units

STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS
- ACTIVE
- COMBINED
- Sections

Wells Query Events
- <all other values>

GIS_STAT_TYPE
- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS

1,500 750 0 1,500 Feet

1:14,145

'APIWellNo:43047503010000'

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 3/24/2009
API NO. ASSIGNED: 43047503010000
WELL NAME: HOSS 907-31 SWD
OPERATOR: EOG Resources, Inc. (N9550)
PHONE NUMBER: 435 781-9111
CONTACT: Kaylene Gardner

PROPOSED LOCATION: SESE 31 080S 230E
Permit Tech Review: ☑

SURFACE: 0339 FSL 1246 FEL
Engineering Review: ☐

BOTTOM: 0339 FSL 1246 FEL
Geology Review: ☑

COUNTY: UINTAH
LATITUDE: 40.07293
LONGITUDE: -109.36411
UTM SURF EASTINGS: 639498.00
NORTHINGS: 4436924.00
FIELD NAME: NATURAL BUTTES
LEASE TYPE: 1 - Federal
LEASE NUMBER: UTU61401
PROPOSED FORMATION: GRRV
SURFACE OWNER: 1 - Federal
COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - NM 2308
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** 49-225
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

LOCATION AND SITING:

- ☐ **R649-2-3.**
  Unit:
- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**
  Board Cause No: R649-3-3
  Effective Date:
  Siting:
- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed
BADLANDS U NON PA:

Stipulations: 4 - Federal Approval - dmason

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: HOSS 907-31 SWD
API Well Number: 43047503010000
Lease Number: UTU61401
Surface Owner: FEDERAL
Approval Date: 3/26/2009

Issued to:
EOG Resources, Inc., 1060 East Highway 40, Vernal, UT 84078

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-3.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

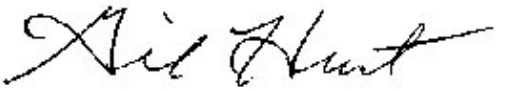
Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

Notification Requirements:
Notify the Division with 24 hours of spudding the well.
- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.
- Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

Reporting Requirements:
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Approved By:



Gil Hunt
Associate Director, Oil & Gas

API Well No: 43047503010000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU61401

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: BADLANDS

1. TYPE OF WELL Water Disposal Well

8. WELL NAME and NUMBER: HOSS 907-31 SWD

2. NAME OF OPERATOR: EOG Resources, Inc.

9. API NUMBER: 43047503010000

3. ADDRESS OF OPERATOR: 1060 East Highway 40 , Vernal, UT, 84078

PHONE NUMBER: 435 781-9111 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0339 FSL 1246 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 31 Township: 08.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
✓ SPUD REPORT Date of Spud: 9/22/2009	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The referenced well was spud on 9/22/2009.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
October 12, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Mickenzie Gates	435 781-9145	Operations Clerk
SIGNATURE N/A		**DATE** 10/9/2009

API Well No: 43047503010000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 10/29/2009	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please see the attached well chronology report for the referenced well showing all activity up to 10/29/2009.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
November 02, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Mickenzie Gates	435 781-9145	Operations Clerk
SIGNATURE N/A		**DATE** 10/29/2009

RECEIVED October 29, 2009

WELL CHRONOLOGY REPORT

Report Generated On: 10−29−2009

Well Name	HOSS 907−31 SWD	**Well Type**	SWD	**Division**	DENVER
Field	PONDEROSA	**API #**	43−047−50301	**Well Class**	COMP
County, State	UINTAH, UT	**Spud Date**	09−24−2009	**Class Date**	
Tax Credit	N	**TVD / MD**	2,345/ 2,345	**Property #**	061932
Water Depth	0	**Last CSG**	3.5	**Shoe TVD / MD**	0/ 0
KB / GL Elev	4,867/ 4,864				
Location	Section 31, T8S, R23E, SWSE, 484 FSL & 1352 FEL				

Event No	1.0	**Description**	SALT WATER DISPOSAL FACILITY		
Operator	EOG RESOURCES, INC	**WI %**	100.0	**NRI %**	0.0

AFE No	304877	**AFE Total**	742,600	**DHC / CWC**	427,600/ 315,000
Rig Contr	CRAIGS RIG #2	**Rig Name**	2	**Start Date**	03−31−2009
Release Date					

03−31−2009 **Reported By** SHEILA MALLOY

DailyCosts: Drilling	$0	**Completion**	$0	**Daily Total**	$0
Cum Costs: Drilling	$0	**Completion**	$0	**Well Total**	$0

MD	0	**TVD**	0	**Progress**	0	**Days**	0	**MW**	0.0	**Visc**	0.0

Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: LOCATION DATA

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION DATA 339’ FSL & 1246’ FEL (SE/SE) SECTION 31, T9S, R23E UINTAH COUNTY, UTAH LAT 40.073322, LONG 109.365175 (NAD 83) LAT 40.073358, LONG 109.364494 (NAD 27) CRAIG’S ROUSTABOUT OBJECTIVE: 2345’ MD, MESAVERDE DW/GAS PODEROSA PROSPECT DD&A: CHAPITA DEEP NATURAL BUTTES FIELD LEASE: UTU: 61401 ELEVATION: 4864.0’ NAT GL, 4863.6’ PREP GL (DUE TO ROUNDING PREP GL WILL BE 4864’), ’ KB (’) EOG GWI 100%, NRI

09−08−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $50,000 **Completion** $0 **Daily Total** $50,000
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	START LOCATION TODAY 9/8/09.

09−09−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION 30% COMPLETE.

09−10−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION 40% COMPLETE.

09−11−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION COMPLETE. LINE MONDAY. ROCK LOCATION.

09−14−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LINE TODAY. HAULING ROCK ON LOCATION.

09−15−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION IS COMPLETE. HAULING ROCK.

09−16−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION IS COMPLETE. HAULING ROCK.

09−17−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION IS COMPLETE. HAULING ROCK.

09−18−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: BUILD LOCATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION IS COMPLETE. HAULING ROCK.

09−21−2009 **Reported By** TERRY CSERE

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0
Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000
MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0
Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0
Activity at Report Time: LOCATION BUILD

Start	End	Hrs	Activity Description
06:00	06:00	24.0	LOCATION COMPLETE. HAULING ROCK.

09−23−2009 **Reported By** KENT DEVENPORT

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0

Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000

MD 0 **TVD** 0 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0

Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: SPUD NOTIFICATION

Start	End	Hrs	Activity Description
06:00	06:00	24.0	CRAIGS ROUSTABOUT SERVICE SPUD A 20" HOLE ON 9/22/09 @ 7:00 AM. SET +/−60’ OF 13.375" CONDUCTOR. CEMENT TO SURFACE WITH READY MIX. CAROL DANIELS W/UDOGM WAS NOTIFIED BY PHONE MESSAGE AND BLM WAS NOTIFIED BY EMAIL OF SPUD ON 9/21/09 @ 6:53 AM.

09−25−2009 **Reported By** JESSE TATMEN

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0

Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000

MD 940 **TVD** 940 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0

Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: DRILLING AT 940’

Start	End	Hrs	Activity Description
06:00	06:00	24.0	DRILL WITH AIR 90’−940’ GL. NO WATER ENCOUNTERED. SPUD 9/24/2009

09−26−2009 **Reported By** JESSE TATMEN

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0

Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000

MD 1,750 **TVD** 1,750 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0

Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: DRILLING AT 1750’

Start	End	Hrs	Activity Description
06:00	06:00	24.0	DRILLING AT 1750’. DRILLED WITH AIR 940’−1750’ GL. ENCOUNTERED WATER AT 1650’ GL. COLLECTED SAMPLES. CIRCULATING FLUID TO THE PIT TO BUILD VOLUME. WILL FLUID DRILL PAST 1750’ GL. NOTIFICATION SENT TO BLM VIA ELECTRONIC FORM OF RUNNING 9.625" SURFACE CASING FOR 7:00 AM 9/27/09.

09−27−2009 **Reported By** JESSE TATMEN

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0

Cum Costs: Drilling $50,000 **Completion** $0 **Well Total** $50,000

MD 2,089 **TVD** 2,089 **Progress** 0 **Days** 0 **MW** 0.0 **Visc** 0.0

Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: CIRCULATE. PREP FOR LOGS.

Start	End	Hrs	Activity Description
06:00	03:30	21.5	DRILLED 1750’−2089’ GL ALTERNATING BETWEEN AIR AND FLUID. LOST RETURNS AT 2080’.
03:30	06:00	2.5	CIRCULATING FROM 2089’ GL TO SURFACE. WAITING ON LOGGERS. EARLIEST LOGGERS CAN BE ON LOCATION IS 14:00 HRS, 9/27/09.

09−28−2009 **Reported By** JESSE TATMEN

DailyCosts: Drilling $0 **Completion** $0 **Daily Total** $0

Cum Costs: Drilling	$50,000		**Completion**	$0		**Well Total**	$50,000				
MD	2,089	**TVD**	2,089	**Progress**	0	**Days**	0	**MW**	0.0	**Visc**	0.0
Formation :		**PBTD :** 0.0		**Perf :**		**PKR Depth :** 0.0					

Activity at Report Time: RIH TO DRESS CMT PLUG

Start	End	Hrs	Activity Description
06:00	06:00	24.0	RUN OH LOGS: SCHLUMBERGER PEX. RIH 2043'. SET CMT PLUG. POOH TO 1965'. CIRCULATE CLEAN. POOH. RIH TO DRESS OF CMT PLUG.

09−29−2009 **Reported By** JESSE TATMEN

DailyCosts: Drilling	$0		**Completion**	$0		**Daily Total**	$0				
Cum Costs: Drilling	$50,000		**Completion**	$0		**Well Total**	$50,000				
MD	2,089	**TVD**	2,089	**Progress**	0	**Days**	0	**MW**	0.0	**Visc**	0.0
Formation :		**PBTD :** 0.0		**Perf :**		**PKR Depth :** 0.0					

Activity at Report Time: CIRC TO POH F/ CASING @ 2030'

Start	End	Hrs	Activity Description
06:00	09:30	3.5	TRIP IN HOLE AND CIRCULATE @ 2071', NO CEMENT FOUND TILL 2071'
09:30	17:30	8.0	TRIP OUT OF HOLE AND RUN FLUID LEVEL INDICATOR WATER @ 87', POUR 6 CUBIC YARDS OF SAND INTO WELL BORE.
17:30	21:00	3.5	TRIP IN HOLE W/ CIRCULATING SUB AND DRILL PIPE TO 1875', ENCOUNTERED TOP OF SAND, WASH SAND FROM WELL BORE TO A TOTAL DEPTH OF 2043', CIRCULATE TO CLEAN WELL BORE.
21:00	22:00	1.0	SPOT CEMENT PLUG OF 10 BBL'S TOTAL WITH A DISPLACEMENT OF 7 BBL'S.
22:00	02:00	4.0	TRIP OUT OF HOLE 180' (1863') CIRCULATE DRILL STRING AND HOLE CLEAN. COMPLETE THE TRIP OUT OF HOLE
02:00	04:00	2.0	TRIP IN THE HOLE WITH DRILLING ASSEMBLY. TAG TOP OF CEMENT @ 2018'
04:00	06:00	2.0	DRILL CEMENT AND CLEAN HOLE TO 2030' TO FIT LENGTH OF CASING. CIRCULATE BOTTOMS UP BEFORE TRIPPING OUT OF HOLE FOR 9 5/8" CASING

09−30−2009 **Reported By** JESSE TATMEN / DAVID BRINKERHOFF

DailyCosts: Drilling	$222,715		**Completion**	$0		**Daily Total**	$222,715				
Cum Costs: Drilling	$272,715		**Completion**	$0		**Well Total**	$272,715				
MD	2,089	**TVD**	2,089	**Progress**	0	**Days**	0	**MW**	0.0	**Visc**	0.0
Formation :		**PBTD :** 0.0		**Perf :**		**PKR Depth :** 0.0					

Activity at Report Time: WOC

Start	End	Hrs	Activity Description
06:00	09:00	3.0	POH AFTER DRESSING CMT TO 2030'.
09:00	12:30	3.5	RUN 9.625", 36#, J55, STC CASING TO 2027.85'. TOTAL JTS 47. FS @ 2026', 2 JTS CASING, FC @ 1935', 45 JTS CASING.
12:30	16:00	3.5	CEMENTING W/ HALLIBURTON, PLUG DID NOT SEAT, HELD PRESSURE. GOOD RETURNS THROUGHOUT OPERATIONS, 40 BBL'S LEAD CEMENT TO SURFACE, ANNULUS FALLING WHEN PUMPING STOPPED. PUMPED CEMENT AS FOLLOWS: 10 BBL FRESH WATER, 25 BBL SUPERFLUSH, 10 BBL FRESH WATER, 40 SXS 10.5 PPG VARICEM SCAVENGER CEMENT (YIELD: 4.39 FT3/SX, MIX:28.21 GAL/SX WITH 0.3% STEELSEAL, 0.2% POLY−E−FLAKE, 5 LBM PHENOSEAL, 0.1% TUF−FIBER), 10 BBL FRESH WATER, 25 BBL SUPER FLUSH, 10 BBL FRESH WATER, 40 SXS 10.5 PPG VARICEM SCAVENGER CEMENT (YIELD: 4.39 FT3/SX, MIX:28.21 GAL/SX WITH 0.3% STEELSEAL, 0.2% POLY−E−FLAKE, 5 LBM PHENOSEAL, 0.1% TUF−FIBER), 10 BBL FRESH WATER, 440 SXS VARICEM 12.3 PPG LEAD CEMENT (YIELD: 2.42 FT3/SX, MIX:13.46 GAL/SX WITH 0.3% STEELSEAL, 0.2% POLY−E−FLAKE, 5 LBM PHENOSEAL, 0.1% TUF−FIBER, 1% MICROBOND), 200 SXS HALCEM 15.6 PPG TAIL CEMENT (YIELD: 1.21 FT3/SX, MIX: 5.35 GAL/SX WITH 3% MICROBOND), DISPLACED WITH 150 BBL FRESH WATER.

16:00	18:00	2.0	TOP JOB #1, MIX AND PUMP 50 SACKS x 15.8 PPG CEMENT, HOLE FILLED AND REMAINED FULL. PLAN TO WAIT UNTIL 10/5/2009 TO DRILL OUT SHOE TRACK AND RUN CBL BEFORE DEEPENING WELL TO TOTAL DEPTH.

10−05−2009 **Reported By** KENT DEVENPORT

DailyCosts: Drilling	$2,128	**Completion**	$0	**Daily Total**	$2,128
Cum Costs: Drilling	$274,843	**Completion**	$0	**Well Total**	$274,843

MD	2,089	**TVD**	2,089	**Progress**	0	**Days**	0	**MW**	0.0	**Visc**	0.0

Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: DRILLING @ 2250’

Start	End	Hrs	Activity Description
06:00	10:00	4.0	REPAIR STARTER MOTORS ON PRIME MOVER FOR RIG.
10:00	13:00	3.0	RIH WITH 8.75" DRILLING ASSEMBLY − TAG CEMENT @ 1930’ (ESTIMATED 8’ ABOVE FLOAT COLLAR)
13:00	16:00	3.0	DRILL OUT SHOE TRACK TO FLOAT SHOE & CIRCULATE DOUBLE BOTTOMS UP
16:00	18:00	2.0	TRIP OUT OF HOLE
18:00	21:00	3.0	RUN CASING BOND LONG WITH CUTTER WIRE LINE TO 2023’
21:00	00:00	3.0	RIH WITH 8.75" DRILLING ASSEMBLY AND DRILL REMAINDER OF SHOE TRACK & CLEAN OUT OPEN HOLE TO 2089’ (SAND & CEMENT RETURNS) WATER RETURNS IMMEDIATELY AFTER DRILLING OUT FLOAT SHOE WITH IMMEDIATE DROP IN WEIGHT ON BIT. HOLE FILLED AND REMAINED FULL.
00:00	06:00	6.0	DRILLING 8.75" FROM 2089’ TO 2250’. STILL DRILLING ON PUMP WITH FULL RETURNS. COULD NOT DRILL WITH AIR DUE TO RAPID INCREASE IN FLUID VOLUME THOUGHT HOLDING TANKS AND RESERVE PIT.

10−07−2009 **Reported By** KYLAN COOK

DailyCosts: Drilling	$26,112	**Completion**	$0	**Daily Total**	$26,112
Cum Costs: Drilling	$300,955	**Completion**	$0	**Well Total**	$300,955

MD	2,345	**TVD**	2,345	**Progress**	0	**Days**	0	**MW**	0.0	**Visc**	0.0

Formation : **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: RDSU/WO COMPLETION

Start	End	Hrs	Activity Description
06:00	09:30	3.5	CONTINUE DRILLING F/ 2250’ TO 2345’. REACHED TD @ 09:30 HRS, 10/6/09. CONTINUED WITH FLUID DRILLING DUE TO POSSIBLE FLUID PRODUCTION.
09:30	10:30	1.0	CIRCULATE HOLE CLEAN FOR LOGGING.
10:30	12:30	2.0	POH @ T.D. FOR LOGGING. CHECK FLUID LEVEL AFTER FILLING HOLE. DROPPED TO 108’ AND STOOD AT THAT DEPTH.
12:30	17:30	5.0	RIG UP & RUN PEX LOG WITH SCHLUMBERGER, LOGGING DEPTH 2345’.
17:30	19:00	1.5	RIG DOWN AND RELEASE CRAIG’S RIG #2 @ 19:00 HRS, 10/6/09.

10−13−2009 **Reported By** BAUSCH

DailyCosts: Drilling	$0	**Completion**	$57,625	**Daily Total**	$57,625
Cum Costs: Drilling	$300,955	**Completion**	$57,625	**Well Total**	$358,580

MD	2,345	**TVD**	2,345	**Progress**	0	**Days**	0	**MW**	0.0	**Visc**	0.0

Formation : BIRDNEST **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: SWAB FOR WATER SAMPLE

Start	End	Hrs	Activity Description

07:00	17:00	10.0	MIRUSU. NU WH. NU 11'' X 5K BOP. RIH W/9−5/8'' CSG SCRAPER ON 3−1/2'' COATED TBG TO 2027'. POH. RIH W/WEATHERFORD ARROW SET PKR TO 1950'. ND BOP. NU WH. PUMPED 127 BLS PACKER FLUID DN CSG. ND WH. SET PKR @ 1951' KB W/15K. NU WH. PRESSURE TEST PKR TO 600 PSIG.WOULD NOT TEST. ND WH. UNSET PKR. RIH 1 JT. SET PKR @ 1983' W/15K TENSION. NU WH. PRESSURE TEST PKR TO 600 PSIG/15 MIN. RU TO SWAB. IFL @ 600'. MADE 7 SWAB RUNS. REC 36 BLW. SDFN.

TUBING DETAIL LENGTH

9−5/8'' ARROW SET PROD PKR 9.02'
1 JT 3−1/2'' 9.3# J−55 TBG (INTERNALLY COATED) 32.42'
3 1/2'' SN NIPPLE 1.10'
60 JTS 3 1/2'' 9.3# J−55 TBG 1940.47'
BELOW KB .0'
LANDED @ 1983.01' KB

10−14−2009 **Reported By** BAUSCH

DailyCosts: Drilling	$0	**Completion**	$1,255	**Daily Total**	$1,255
Cum Costs: Drilling	$300,955	**Completion**	$58,880	**Well Total**	$359,835

MD	2,345	**TVD**	2,345	**Progress**	0	**Days**	0	**MW**	0.0	**Visc**	0.0

Formation : BIRDNEST **PBTD :** 0.0 **Perf :** **PKR Depth :** 0.0

Activity at Report Time: PREP FOR INJECTION

Start	End	Hrs	Activity Description
07:00	10:00	3.0	MADE 4 SWAB RUNS FOR SAMPLE COLLECTION. IFL @ SURFACE. RECOVERED 12 BW. RDMOSU. SI.

FINAL REPORT.

API Well No: 43047503010000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU61401

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: BADLANDS

1. TYPE OF WELL Water Disposal Well

8. WELL NAME and NUMBER: HOSS 907-31 SWD

2. NAME OF OPERATOR: EOG Resources, Inc.

9. API NUMBER: 43047503010000

3. ADDRESS OF OPERATOR: 1060 East Highway 40 , Vernal, UT, 84078

PHONE NUMBER: 435 781-9111 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0339 FSL 1246 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 31 Township: 08.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 12/1/2009	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

No activity has occurred since last submission on 10/29/2009 to 12/1/2009.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
December 02, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Mickenzie Gates	435 781-9145	Operations Clerk
SIGNATURE N/A		**DATE** 12/1/2009

RECEIVED December 01, 2009

API Well No: 43047503010000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU61401

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: BADLANDS

1. TYPE OF WELL Water Disposal Well

8. WELL NAME and NUMBER: HOSS 907-31 SWD

2. NAME OF OPERATOR: EOG Resources, Inc.

9. API NUMBER: 43047503010000

3. ADDRESS OF OPERATOR: 1060 East Highway 40 , Vernal, UT, 84078

PHONE NUMBER: 435 781-9111 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0339 FSL 1246 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 31 Township: 08.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 12/31/2009	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

No activity has occurred since last submission on 12/1/2009 to 12/31/2009.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 04, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Mickenzie Gates	435 781-9145	Operations Clerk
SIGNATURE N/A		**DATE** 12/31/2009

RECEIVED December 31, 2009

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

DEC 2 3 2009

RECEIVED
DEC 3 1 2009
DIV. OF OIL, GAS & MINING

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Ed Forsman
EOG Resources, Inc
211 South, 100 East
Vernal, UT 84078

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

RE: Authorization to Commence Injection and
Minor Permit Modification No. 1
EPA UIC Permit UT21162-07870
Well: Hoss SWD 907-31
SWSE Sec. 31-T8S-R23E
Uintah County, UT
API No.: 43-047-50301

Dear Mr. Forsman:

Thank you for submitting information regarding completion of construction and testing for the above referenced injection well. Requirements of your UIC Permit included submittal of the following information to the Director:

1. Well Completion forms and diagrams
2. Part I (Internal) Mechanical Integrity Test results
3. Open Hole Logs
4. Cement Bond Log
5. Injection Zone Pore Pressure
6. Injection Zone Fluid Sample, including naturally occurring hydrocarbons
7. Injectate Sample
8. Step Rate Test results
9. Temperature Survey for AOR Well Hoss 8-31

All required information has been submitted and has been reviewed and approved by the EPA. Please note that with the approval of the Cement Bond Log, a Radioactive Tracer Survey and Temperature Survey are not required for the Hoss SWD 907-31 well. Therefore, effective upon receipt of this letter, Administrative approval is hereby granted for injection under the conditions of your UIC Permit.

Along with this Authorization, your UIC Permit is being modified to reflect the final well completion and test results. The well construction details included in Appendix A are being modified to update how the well was completed. The updated version of Appendix A, which replaces the version included in your Final Permit, is attached.

As of this approval, responsibility for permit compliance and enforcement is transferred to the EPA Region 8 UIC Technical Enforcement Program Office. Therefore, please direct all future notification, reporting, monitoring and compliance correspondence to the following address, referencing your UIC Permit number and well name:

US EPA, Region 8
Attn: Nathan Wiser
MC: ENF-UFO
1595 Wynkoop Street
Denver, CO 80202

For questions regarding notification, testing, monitoring, reporting or other Permit requirements, please contact Nathan Wiser of the UIC Technical Enforcement Program at 800-227-8917 (ext. 312-6211). Please be reminded that it is your responsibility to be aware of and to comply with all conditions of your Permit.

If you have any questions regarding this Authorization, please call Sarah Bahrman at 800-227-8917 (ext. 312-6243).

Sincerely,

for Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

Attachments: Minor Modification No. 1 – Appendix A

cc:
Uintah & Ouray Business Committee:
Curtis Cesspooch, Chairman
Ronald Groves, Councilman
Irene Cuch, Vice-Chairwoman
Steven Cesspooch, Councilman
Phillip Chimburas, Councilman
Frances Poowegup, Councilwoman

Daniel Picard
BIA - Uintah & Ouray Indian Agency

Ferron Secakuku
Director, Natural Resources
Ute Indian Tribe

Larry Love
Director of Energy & Minerals Dept.
Ute Indian Tribe

Gil Hunt
Associate Director
Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office
BLM - Vernal Office

API Well No: 43047503010000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU61401

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: BADLANDS

1. TYPE OF WELL Water Disposal Well

8. WELL NAME and NUMBER: HOSS 907-31 SWD

2. NAME OF OPERATOR: EOG Resources, Inc.

9. API NUMBER: 43047503010000

3. ADDRESS OF OPERATOR: 1060 East Highway 40 , Vernal, UT, 84078

PHONE NUMBER: 435 781-9111 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0339 FSL 1246 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 31 Township: 08.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 2/2/2010	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
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	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

No activity has occurred since last submission on 12/31/2009 to 2/2/2010.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
February 03, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Mickenzie Gates	435 781-9145	Operations Clerk
SIGNATURE N/A		**DATE** 2/2/2010

RECEIVED February 02, 2010

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (highlight changes) FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-61401

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER SWD

7. UNIT or CA AGREEMENT NAME: Badlands

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: Hoss 907-31 SWD

2. NAME OF OPERATOR: EOG Resources, Inc.

9. API NUMBER: 43-047-50301

3. ADDRESS OF OPERATOR: 600 17th St., Suite 1000N CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 824-5526

10 FIELD AND POOL, OR WILDCAT: Natural Buttes

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 484' FSL & 1352' FEL 40.073322 LAT 109.365175 LON
AT TOP PRODUCING INTERVAL REPORTED BELOW: Same
AT TOTAL DEPTH: Same

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 31 8S 23E S

12. COUNTY: Uintah

13. STATE: UTAH

14. DATE SPUDDED: 9/22/2009

15. DATE T.D. REACHED: 10/6/2009

16. DATE COMPLETED: N/A SWD well ABANDONED ☐ READY TO PRODUCE ☑ (10/16/09)

17. ELEVATIONS (DF, RKB, RT, GL): 4864' NAT GL

18. TOTAL DEPTH: MD 2,345 TVD

19. PLUG BACK T.D.: MD TVD

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
PEX

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☑ YES ☐ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
12.25	9.625 J-55	36.0	0	2,026		720 sx		0	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
3.5	1,983							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A)				
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
2026 - 2345			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS:

☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS:
Active Water Disposal

RECEIVED
FEB 11 2010
DIV. OF OIL, GAS & MINING

(5/2000)

(CONTINUED ON BACK)

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

No gas

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Green River	1,797
				Birdsnest	2,074
				Mahogany	2,687

35. ADDITIONAL REMARKS (Include plugging procedure)

This well is an active salt water disposal well.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Mary A. Maestas TITLE Regulatory Assistant

SIGNATURE Mary A. Maestas DATE 2/5/2010

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

43-047-50301
31 8S 23E

eog resources

EOG Resources, Inc.
1060 E Hwy 40
Vernal, Utah 84078

Certified Mail
7010 1670 0001 2225 8651

February 14, 2011

RECEIVED
FEB 17 2011
DIV. OF OIL, GAS & MINING

United States Environmental Protection Agency
Region 8
Attn: Nathan Wiser
Mail Stop: 8ENF-UFO
1595 Wynkoop Street
Denver, CO 80202

RE:

Chapita Wells Unit 550-30N
EPA Permit No. UT20980-06509

Natural Buttes Unit 21-20B
EPA Permit No. UT20623-03708

Chapita Wells Unit SWD 2-29
EPA Permit No. UT 21049-07108

Hoss SWD 901-36
EPA Permit No. UT21157-07865

Hoss SWD 903-36
EPA Permit No. UT21158-07866

Hoss SWD 904-36
EPA Permit No. UT21159-07867

Hoss SWD 905-31
EPA Permit No. UT21160-07868

Hoss SWD 906-31
EPA Permit No. UT21161-07869

Hoss SWD 907-31
EPA Permit No. UT21162-07870

Dear Mr. Wiser:

Please find enclosed the Annual Disposal/Injection Well Monitoring Report (EPA Form 7520-11) for the above referenced wells. As requested, I have enclosed a copy of the water analysis for the water that we inject into each well. The water that is injected into the Chapita Wells Unit 550-30N and Chapita Wells Unit SWD 2-29 wells is pumped from the same facility located at the Chapita Wells 550-30N well site. All of the produced water that is injected into the six Hoss disposal wells is pumped from a single disposal facility (Hoss SWD Facility). We received the authorization to inject into the Hoss SWD 906-31 well on January 14, 2010. It was the last approval that we needed to operate the facility. We commenced injection from the Hoss SWD facility to all 6 Hoss SWD wells on that date. I have included a copy of the water analysis for that facility as well. The produced water that is injected into the NBU 21-20B comes from its own facility. I have also included a copy of the water analysis for that facility.

eog resources

EOG Resources, Inc.
1060 E Hwy 40
Vernal, Utah 84078

We ran the required Temperature Logs on the Chapita Wells Unit 1125-29 (AOR well for the Chapita Wells Unit SWD 2-29 well), Chapita Wells Unit 47-30 (AOR well for the Chapita Wells Unit 550-30N SWD), and the Chapita 550-30N SWD and submitted logs in December. They are required on an annual basis. We are also required to run Temperature logs for the AOR wells associated with the six Hoss Disposal Wells and pressure surveys on the six disposal wells. I have included copies of the Temperature logs for the AOR wells listed below and the results of the pressure surveys for the disposal wells (see table).

Well	Hoss 901	Hoss 903	Hoss 904	Hoss 905	Hoss 906	Hoss 907
Fluid level	Surface	Surface	Surface	Surface	12 ft.	Surface
Pore Pressure (psig)	934 psig	1029 psig	1119 psig	936 psig	927 psig	912 psig
AOR Well	Hoss 1-36	Hoss 2-36	Hoss 62-36	Federal 23-31	Hoss 8-31	Hoss 8-31
AOR Well	Hoss 10-31	Hoss 5-36		N. Chapita Federal 24-31	Hoss 9-31	
AOR Well	N.Chapita Federal 44-36				N.Chapita Federal 43-31	

I ran pore pressure test on two wells per day for three days. I have digital Excel spreadsheet files of the pore pressure tests from Production Logging Services that I can forward to if you would like (350 pages each in hard copy). We have not started construction on the Coyote SWD 1-16 well (EPA Permit No. UT22165-08747) but we plan to do so soon. If you need any other information from me, I can be reached at (435) 781-9100 (office) or (435) 828-8236 (cell).

Sincerely,

Ed Forsman
Production Engineering Advisor
EOG Resources – Vernal Operations

Attachments

cc: State of Utah-Division of Oil, Gas & Mining
BLM - Vernal Field Office
Jim Schaefer – Denver Office
Dave Long – Big Piney Office

OMB No. 2040-0042 Approval Expires 1/31/05

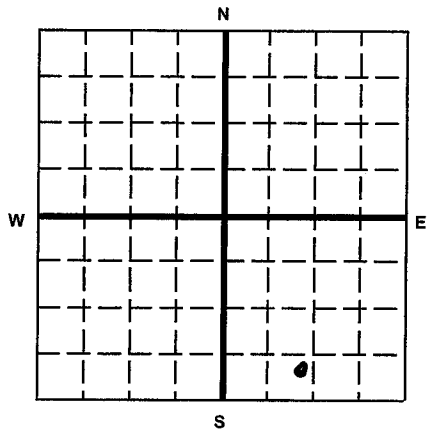
United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
EOG Resources, Inc.
1060 East Highway 40 Vernal, UT 84078

Name and Address of Surface Owner
Bureau of Land Management
170 South 500 East Vernal UT 84078

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
Utah	Uintah County	UT21162-07870

Surface Location Description
S 1/4 of W 1/4 of S 1/4 of E 1/4 of Section 31 Township 08S Range 23E

Locate well in two directions from nearest lines of quarter section and drilling unit
Surface Location 484 ft. frm (N/S) SL Line of quarter section
and 1357 ft. from (E/W) EL Line of quarter section.

WELL ACTIVITY
- [x] Brine Disposal
- [ ] Enhanced Recovery
- [ ] Hydrocarbon Storage

TYPE OF PERMIT
- [x] Individual
- [ ] Area

Number of Wells 1

Lease Name HOSS Well Number HOSS SWD 907-31

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	2010	14	50	37771	0	0	0
February	2010	23	52	56775	0	0	0
March	2010	39	98	65683	0	0	0
April	2010	50	100	68491	0	0	0
May	2010	54	65	56998	0	0	0
June	2010	52	63	55260	0	0	0
July	2010	55	63	56021	0	0	0
August	2010	60	114	67580	0	0	0
September	2010	59	116	79480	0	0	0
October	2010	63	69	73948	0	0	0
November	2010	71	81	66077	0	0	0
December	2010	81	173	67378	0	0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Ed Forsman - Production Engineering Advisor	Ed Forsman	02/11/11

EPA Form 7520-11 (Rev. 8-01)

PAPERWORK REDUCTION ACT

The public reporting and record keeping burden for this collection of information is estimated to average 25 hours annually for operators of Class I wells and 5 hours annually for operators of Class II wells. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

NALCO

1465 East 1650 south Vernal UT 84078 (435) 789-2069 www.nalco.com

Water Analysis Report

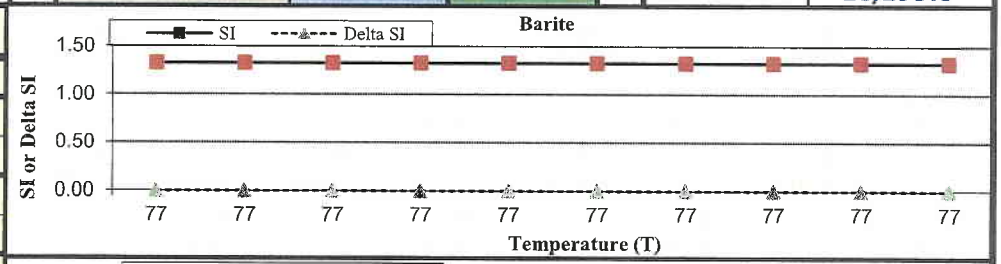
Field :	**EOG**	**Sample Date :**	**1/11/2011**
County :		**Formation :**	
Location :	Hoss SWD	**Rock Type :**	
Lab ID :		**Depth :**	**Analysed Date: 1/13/2011**
Comments :			

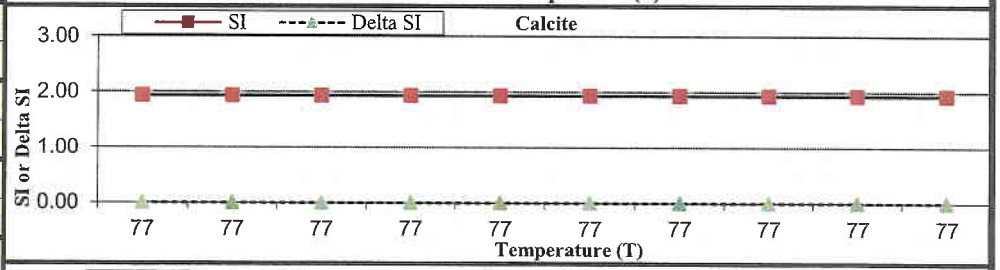
CATIONS	mg/l
Potassium	78.8
Sodium	8,860.5
Calcium	406.5
Magnesium	61.5
Iron	2.8
Barium	28.4
Strontium	31.2
SUM +	**9,469.7**

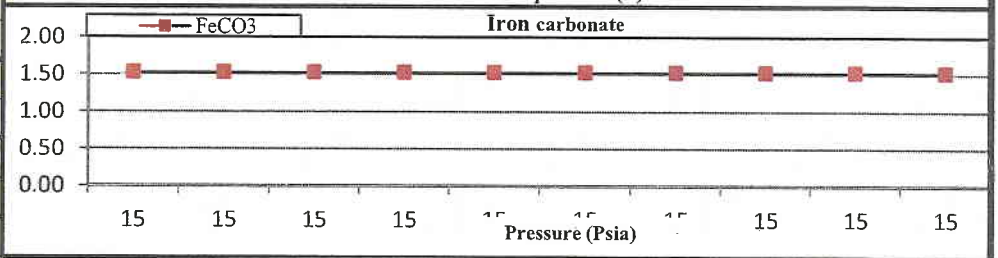
	Measured	Calculated
Total Dissolve Solid	26942.07	0.00
Total Hardness		1268.40
PH	8.20	0.00
Total H2S aq	0.00	0.00
Manganese	0.47	
PO4 Residual	0.00	
SRB Vials Turned	0.00	
APB Vials Turned	0.00	

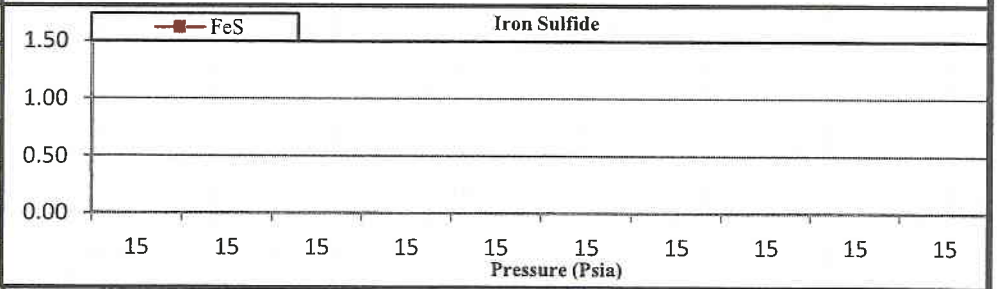
ANIONS	mg/l
Sulfate	40.0
Chloride	17,000.0
Carbonate	0.0
Bicarbonate	1,159.0
Bromide	0.0
Organic Acids	0.0
Hydroxide	0.0
SUM -	**18,199.0**

Initial(BH)	Final(WH)
Saturation Index values	
Calcite ($CaCO_3$)	
1.93	1.93
Barite ($BaSO_4$)	
1.32	1.32
Halite (NaCl)	
-2.64	-2.64
Gypsum	
-2.21	-2.21
Hemihydrate	
-2.97	-2.97
Anhydrite	
-2.46	-2.46
Celestite	
-1.65	-1.65
Iron Sulfide	
0.00	0.00
Zinc Sulfide	
0.00	0.00
Calcium fluoride	
0.00	0.00
Iron Carbonate	
1.52	1.52
Inhibitor needed (mg/L)	
Calcite	**NTMP**
0.32	*0.32*
Barite	**BHPMP**
0.04	*0.04*









Lab Manager: Andrea Craig

Analysis by:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator: EOG Resources, Inc.
Operator Account Number: N 9550
Address: 1060 East Highway 40
city Vernal
state UT zip 84078
Phone Number: (435) 781-9145

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
43-047-50301	HOSS 907-31 SWD		SESE	31	8S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	99996	9/22/2009			10/13/09	

Comments: BIRDSNEST ZONE

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

RECEIVED
OCT 1 2 2009
DIV. OF OIL, GAS & MINING

ACTION CODES:
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity

Mickenzie Gates
Name (Please Print)
Mickenzie Gates
Signature

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 WYNKOOP STREET
DENVER, CO 80202-1129
http://www.epa.gov/region8

Ref: 8P-W-GW

JUL 30 2009

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

Mr. Ed Forsman
EOG Resources, Inc.
211 South, 100 East
Vernal, UT 84078

Re: FINAL Permit
EPA UIC Permit UT21162-07870
Well: HOSS 907-31
SWSE Sec. 31-T8S-R23E
Uintah County, UT
API No.: 43-047-50301

Dear Mr. Forsman:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed HOSS 907-31 injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

JUL 24 2009

The Public Comment period for this Permit ended on _____. No comments on the Draft Permit were received during the Public Notice period; therefore the Effective Date for this EPA UIC Permit is the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect as of the Effective Date of this Permit.

Please note that under the terms and conditions of this Final Permit you are authorized only to construct the proposed injection well. Prior to commencing injection, you first must fulfill all "Prior to Commencing Injection" requirements of the Final Permit, Part II Section C.1, and obtain written Authorization to Inject from the EPA. It is your responsibility to be familiar with and to comply with all provisions of your Final Permit. The EPA forms referenced in the permit are available at http://www.epa.gov/safewater/uic/reportingforms.html. Guidance documents for Cement Bond Logging, Radioactive Tracer testing, Step Rate testing, Mechanical Integrity demonstration, Procedure in the Event of a Mechanical Integrity Loss, and other UIC guidances, are available at http://www.epa.gov/region8/water/uic/ deep_injection.html. Upon request, hard copies of the EPA forms and guidances can be provided.

RECEIVED
AUG 11 2009
DIV. OF OIL, GAS & MINING

This EPA UIC Permit is issued for the operating life of the well unless terminated (Part III, Section B). The EPA may review this Permit at least every five (5) years to determine whether any action is warranted pursuant to 40 CFR § 144.36(a).

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Sarah Bahrman of my staff at (303) 312-6243, or toll-free at (800) 227-8917, ext. 312-6243.

Sincerely,

Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

enclosure: Final UIC Permit
Statement of Basis

cc: Final Permit Letter:
Uintah & Ouray Business Committee,Ute Indian Tribe
Curtis Cesspooch, Chairman
Irene Cuch, Vice-Chairwoman
Frances Poowegup, Councilwoman
Ronald Groves, Councilman
Phillip Chimburas, Councilman
Steven Cesspooch, Councilman

Daniel Picard, Superintendent
U.S. Bureau of Indian Affairs
Uintah & Ouray Indian Agency

All enclosures:

Larry Love, Director
Energy and Minerals Department
Ute Indian Tribe

Ferron Secakuku
Director, Natural Resources
Ute Indian Tribe

Gil Hunt, Associate Director
Utah Division of Oil, Gas and Mining

Fluid Minerals Engineering Office
U.S. Bureau of Land Management
Vernal Office

EPA

UNDERGROUND INJECTION CONTROL PROGRAM

PERMIT

PREPARED: July 2009

Permit No. UT21162-07870

Class II Salt Water Disposal Well

HOSS 907-31
Uintah County, UT

Issued To

EOG Resources, Inc
P.O. Box 4362
Houston, TX 77251-4362

Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

EOG Resources, Inc
P.O. Box 4362
Houston, TX 77251-4362

is authorized to construct and to operate the following Class II injection well or wells:

HOSS 907-31
484 ft FSL & 1352 ft FEL, SWSE S31, T8S, R23E
Uintah County, UT

EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences are not discussed in this document. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. (40 CFR §144.35) An EPA UIC Permit may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §§144.39, 144.40 and 144.41, and may be reviewed at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well(s) unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This EPA Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for a UIC Program is delegated to an Indian Tribe or State. Upon the effective date of delegation, reports, notifications, questions and other correspondence should be directed to the Indian Tribe or State Director.

Issue Date: JUL 30 2009 Effective Date JUL 30 2009

Stephen S. Tuber
Assistant Regional Administrator*
Office of Partnerships and Regulatory Assistance

*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

PART II. SPECIFIC PERMIT CONDITIONS

Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

(a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and

(b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:

  (i) on the injection tubing; and

  (ii) on the tubing-casing annulus (TCA); and

(c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure (MAIP) specified in APPENDIX C is reached at the wellhead; and

(d) a non-resettable cumulative volume recorder attached to the injection line.

4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of Authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or Authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

(a) There is no significant leak in the casing, tubing, or packer (Part I); and

(b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

1. Demonstration of Mechanical Integrity (MI).

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

2. Mechanical Integrity Test Methods and Criteria

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

3. Notification Prior to Testing.

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

4. Loss of Mechanical Integrity.

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

1. Requirements Prior to Commencing Injection.

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

(a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and

(i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or

(ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

As described in Appendix B, the permittee must collect a representative, isolated sample of injection zone formation water and analyze for naturally occurring hydrocarbons. The following procedure describes how all water samples will be analyzed for hydrocarbon content:

The water sample will be captured in a container while maintaining a volume of empty headspace in the container above the water sample. The headspace volume will be tested using gas chromatography for methane, ethane, propane, iso-butane, butane, iso-pentane, and pentane resulting from the degassing of any dissolved gases from the water into the headspace of a sampling container. To analyze for other hydrocarbons, the water sample will be solvent extracted with dichloromethane (DCM). The resulting extract will be analyzed by gas chromatography. These results will be submitted to the appropriate offices of BLM and EPA within thirty days of the completion of the specified laboratory analyses.

2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

In order to establish how the Bird's Nest reacts to injection, permit conditions will require the injection well to undergo monitoring of annual fluid levels. During these tests, the injection well is shut-in and the static fluid level is allowed to stabilize. After the fluid level has stabilized, the static fluid level is measured, cumulative injected volume determined, and the fluid in the well is sampled and analyzed for specific gravity in order to determine the pressure in the Bird's Nest. This information will be tracked year-to-year in order to show the buildup of pressure in the Bird's Nest and the relationship between that pressure and the cumulative volume of fluid injected into the disposal well.

3. Injection Pressure Limitation

(a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.

(b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permitee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

5. Injection Fluid Limitation.

Injected fluids are limited to those which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). The well also may be used to inject approved Class II wastes brought to the surface such as drilling fluids and spent well completion, treatment and stimulation fluids. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved. This well is NOT approved for commercial brine or other fluid disposal operation.

Injected fluids are limited to those which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). The well also may be used to inject approved Class II wastes brought to the surface such as drilling fluids and spent well completion, treatment, and stimulation fluids. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, and NOT approved. This well is NOT approved for commercial brine or other fluid disposal operation.

The source of injected fluids is limited to oil and gas production wells operated by the permittee within the Natural Buttes field.

6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

(a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;

(b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;

(c) the analytical techniques or methods used for analysis.

2. Monitoring Methods.

(a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

(b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.

(c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.

(d) Pressures are to be measured in pounds per square inch (psi).

(e) Fluid volumes are to be measured in standard oil field barrels (bbl).

(f) Fluid rates are to be measured in barrels per day (bbl/day).

3. Records Retention.

(a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.

(b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D. The report of fluids injected during the year must identify each new fluid source by well name and location, and the field name or facility name.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

Section E. PLUGGING AND ABANDONMENT

1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which isolates the injection zone and prevents the movement of fluids into or between underground sources of drinking water, and in accordance with 40 CFR 146.10 and other applicable Federal, State or local law or regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director.

3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abanonment plan.

5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

(a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or

(b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

(a) Provides written notice to the Director;

(b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and

(c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

PART III. CONDITIONS APPLICABLE TO ALL PERMITS

Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other Federal, State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

Section B. CHANGES TO PERMIT CONDITIONS

1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging , or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this Permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

Section C. SEVERABILITY

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

Section E. GENERAL PERMIT REQUIREMENTS

1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

2. Duty to Reapply.

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

3. Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

4. Duty to Mitigate.

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

5. Proper Operation and Maintenance.

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

6. Permit Actions.

This Permit may be modified, revoked and reissued or teminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights.

This Permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information.

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

9. Inspection and Entry.

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

11. Reporting Requirements.

(a) Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.

(b) Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Monitoring Reports. Monitoring results shall be reported at the intervals specified in this Permit.

(d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.

(e) Twenty-four hour reporting. The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:

(i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or

(ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

(f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website http://www.nrc.uscg.mil/index.htm.

(g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.

(h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

Section F. FINANCIAL RESPONSIBILITY

1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

2. Insolvency.

In the event of:

(a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or

(b) suspension or revocation of the authority of the trustee institution to act as trustee; or

(c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

APPENDIX A

WELL CONSTRUCTION REQUIREMENTS

See diagram.

The HOSS 907-31 Salt Water Disposal (SWD) well will be drilled to a total depth of approximately 2,345 ft, which corresponds to the Base of the Birds Nest Member of the Green River Formation.

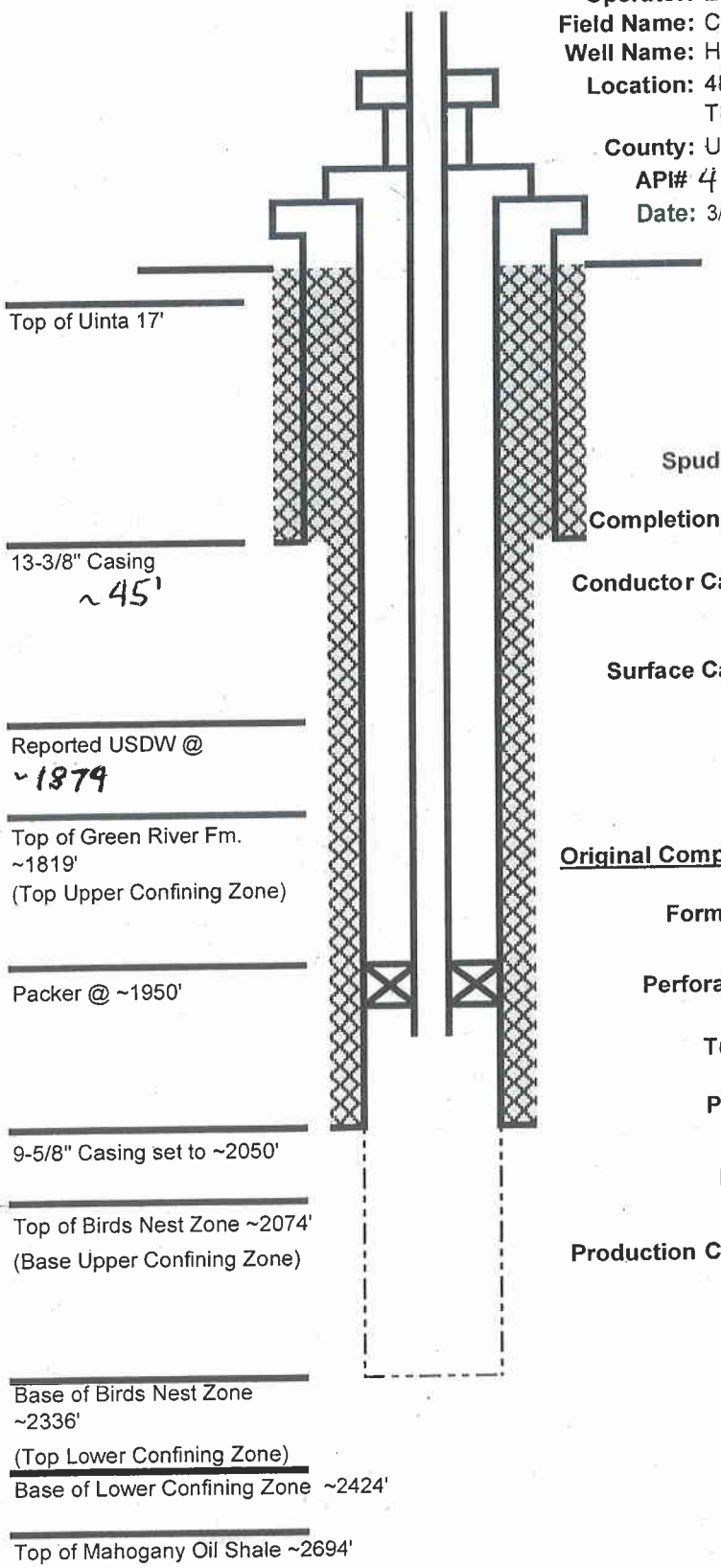
Conductor casing (13-3/8 inch) will be set at a depth of 45 feet in a 17-1/2 inch hole using with cement circulated to the surface.

Surface casing (9-5/8 inch) will be set at a depth of 2,050 feet (KB) in a 12-1/2 inch hole with 563 sacks of Class G cement.

Production Casing will not be used in the completion of the HOSS 907-31 well. An 8-3/4 inch open hole will be drilled through the Birds Nest zone from approximately 2,074-2,336 feet.

The packer will be set no higher than 100 feet above the production casing shoe.

PROPOSED WELL BORE DIAGRAM



Operator: EOG Resources, Inc.
Field Name: Chapita Wells/Badlands Area
Well Name: Hoss SWD 907-31
Location: 484' FSL & 1352' FEL (SE SE) Sec 31-T8S-R23E
County: Uintah
API# 43-047-50301
Date: 3/6/2009

GL: 4864'

KB: 4879' (EST.)

Spud Date: ASAP after approval

Completion Date: ASAP after approval

Conductor Casing: Drill a 17-1/2" hole w/air to 45'
Run 13-3/8" 48# H-40 csg to +/- 45'
Cement to surface

Surface Casing: Drill a 12-1/2" hole w/air to 2050'
Run 9-5/8", 36# J-55 csg to 2050'
Cement w/563 sx Class "G"

Original Completion

Formation: Green River (Birds Nest Zone)

Perforations: Open Hole ~2184' to ~2345'

Tubing: 3 1/2" 7.7#, J-55 @ tbd

Packer: To be placed within 100' of 2050'

PBTD: 2345'

Production Casing: Drill 8-3/4" hole to TD

TD: ~2345'

APPENDIX B

LOGGING AND TESTING REQUIREMENTS

Logs.
Logs will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

WELL NAME: HOSS 907-31

TYPE OF LOG	DATE DUE
CBL/VDL/GAMMA RAY	Injection Well: Prior to injection. If the CBL does not show adequate cement through the confining zone, a Temperature Log and Radioactive Tracer Survey will be required prior to injection and at least once annually.
Open Hole Log	Injection Well: Prior to injection.
TEMP	Injection Well: Prior to injection and at least once annually if the CBL does not show adequate cement.
RATS	Injection Well: Prior to injection if the CBL does not show adequate cement.
TEMP	AOR Well HOSS 8-31: Prior to receiving authorization to inject and at least once annually thereafter. Log should be run from 100 ft below lower confining zone to the surface.

Tests.
Tests will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

WELL NAME: HOSS 907-31

TYPE OF TEST	DATE DUE
Injection Zone Water Sample	Injection Well: Prior to receiving authorization to inject, a representative sample (stabilized spec cond from three swab runs) from the injection zone will be analyzed for TDS, pH, Spec Grav, Spec Cond, and naturally occurring hydrocarbons.
Standard Annulus Pressure	Injection Well: Prior to receiving authorization to inject and at least once every five (5) years after the last successful demonstration of Part I Mechanical Integrity.
Pore Pressure	Injection Well: Prior to injection (baseline) and at least annually to gauge how the birds nest formation reacts to injection.
Step Rate Test	Injection Well: Prior to receiving authorization to inject. If the CBL does now show adequate cement, a step rate test will also be required at least annually. The SRT shall be performed following current EPA guidance.
Injectate Sample	Injection Well: A random, representative sample of the injection water will be collected annually at the sampling tap as described in the permit and analyzed for hydrocarbon content via the method found in Part II Section C.1 of the permit.

APPENDIX C

OPERATING REQUIREMENTS

MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

	MAXIMUM ALLOWED INJECTION PRESSURE (psi)
WELL NAME	ZONE 1 (Upper)
HOSS 907-31	430

INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

WELL NAME: HOSS 907-31

	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT
FORMATION NAME	TOP	BOTTOM	(psi/ft)
Green River: Birds Nest	2,074.00	2,336.00	0.649

ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

APPENDIX D

MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE WEEKLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
OBSERVE AND RECORD	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

ANNUALLY	
ANALYZE	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH

ANNUALLY	
REPORT	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and minimum annulus pressure(s) (psig)
	Each month's injected volume (bbl)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

In addition to these items, additional Logging and Testing results may be required periodically. For a list of those items and their due dates, please refer to APPENDIX B - LOGGING AND TESTING REQUIREMENTS.

APPENDIX E

PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

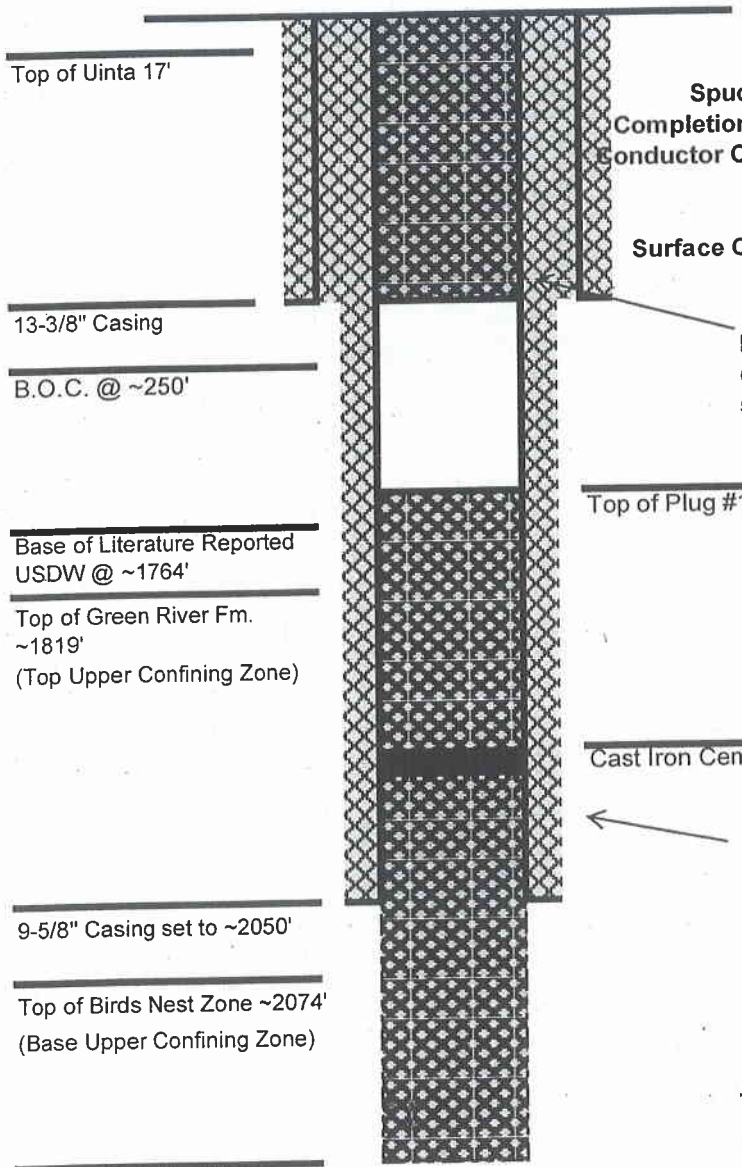
Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local laws or regulations. Tubing, packer, and other downhole apparatus shall be removed. Class A, C, G, and H cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. Within sixty (60) days after plugging, the owner or operator shall submit the Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

PLUG NO. 1: Seal Injection Zone and USDWs: Set Cast Iron Cement Retainer (CICR) at a depth of 2,000 ft, which is approximately 50 ft above the production casing shoe. Squeeze a sufficient volume of cement through the CICR to fill the open hole (approx. 186 sxs). Set a minimum 240-foot cement plug on top of the CICR to approximately 1,760 ft, which is 60 ft above the Top of the Green River.

PLUG NO. 2: Seal surface: Set a cement plug within the 9-5/8 inch casing from the surface to 250 ft.

PROPOSED WELL BORE DIAGRAM

Operator: EOG Resources, Inc.
Field Name: Chapita Wells/Badlands Area
Well Name: Hoss SWD 907-31
Location: 484' FSL & 1352' FEL (SE SE) Sec 31-T8S-R23E
County: Uintah
API#: Will be issued by State of Utah
Date: 3/6/2009



GL: 4864'
KB: 4879' (est.)
Spud Date: ASAP after approval
Completion Date: ASAP after approval
Conductor Casing: Drill a 17-1/2" hole w/air to 45'
Run 13-3/8" 48# H-40 csg to +/- 45'
Cement to surface
Surface Casing: Drill a 12-1/2" hole w/air to 2050'
Run 9-5/8" 36# J-55 csg to 2050"
Cement w/ 563 sx Class G

Top of Uinta 17'

13-3/8" Casing

B.O.C. @ ~250'

Proposed plug #2: 50 sx Class G cmt (w/ 10% bentonite) plug from 250 ft. to surface

Top of Plug #1 @ ~1760

Base of Literature Reported USDW @ ~1764'

Top of Green River Fm. ~1819'
(Top Upper Confining Zone)

Cast Iron Cement Retainer @ 2000'

Proposed plug #1: Set CICR @~2000'. Sqz a sufficient volume of cmt through CICR to fill the open hole (approx. 186 sx Class G w/ 10% Bentonite). Cmt top of CICR to 1664' (100' above base of USDW of 1764') w/ approx. 64 sx Class G cmt w/ 10% Bentonite.

9-5/8" Casing set to ~2050'

Top of Birds Nest Zone ~2074'
(Base Upper Confining Zone)

Tubing: 3 1/2" 9.3#, J-55 @ tbd

Packer: To be placed within 100' of 2184'

PBTD: 2345'
TD: 2345

Base of Birds Nest Zone ~2336'
(Top Lower Confining Zone)

Base of Lower Confining Zone ~2424'

Top of Mahogany Oil Shale ~2694'

Production Casing: Drill 8-3/4" hole to TD

APPENDIX F

CORRECTIVE ACTION REQUIREMENTS

ANNUAL TEMPERATURE LOGGING FOR AOR WELL HOSS 8-31.

The cement bond log for this well does not demonstrate that there is adequate cement through the upper and lower confining zones. For this reason, as shown in Appendix B, this well shall undergo annual temperature logging as proof that it is completed in a manner that prevents fluids within the injection formation from migrating above or below the Birds Nest through pathways behind the AOR well's surface casing.

This log shall be submitted annually to the Director as part of the Annual Report.

If the results of the Temperature logs show any indication of Birds Nest formation fluids moving out of zone, injection shall be shut-in and corrective action may be required in order to ensure that Birds Nest fluids remain within the Birds Nest and do not migrate out of the approved injection zone.

STATEMENT OF BASIS

EOG RESOURCES, INC
HOSS 907-31
UINTAH COUNTY, UT

EPA PERMIT NO. UT21162-07870

CONTACT: Sarah Bahrman
U. S. Environmental Protection Agency
Ground Water Program, 8P-W-GW
1595 Wynkoop Street
Denver, Colorado 80202-1129
Telephone: 1-800-227-8917 ext. 312-6243

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water. Under 40 CFR 144.35 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor authorize injury to persons or property of invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

Upon the Effective Date when issued, the Permit authorizes the construction and operation of injection wells so that the injection does not endanger underground sources of drinking water, governed by the conditions specified in the Permit. The Permit is issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR 144.39, 144.40 and 144.41. The Permit is subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR 144.36(a).

PART I. General Information and Description of Facility

EOG Resources, Inc
P.O. Box 4362
Houston, TX 77251-4362

on

August 22, 2007

submitted an application for an Underground Injection Control (UIC) Program Permit or Permit Modification for the following injection well or wells:

HOSS 907-31
484 ft FSL & 1352 ft FEL, SWSE S31, T8S, R23E
Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The application, including the required information and data necessary to issue or modify a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed and determined by EPA to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

TABLE 1.1 WELL STATUS / DATE OF OPERATION		
NEW WELLS		
Well Name	**Well Status**	**Date of Operation**
HOSS 907-31	New	N/A

PART II. Permit Considerations (40 CFR 146.24)

Hydrogeologic Setting

THE UINTA FORMATION (0'-1,819')

The Uinta Formation is calcareous shale, some limestone, claystone, siltstone, and sandstone. It is a fluvial facies in the eastern and western ends of the basin that interfingers with rocks similar in appearance to the overlying Duchesne River Formation. It grades laterally into thinner bedded calcareous lake deposits in the center of the basin.

The Uinta is very low to very high permeability. Largest primary intergranular permeability of the sandstone seems to be about the same as that of the median for sandstone in the Duchesne River Formation. Most of the formation is finer grained, and, therefore, of lower primary permeability than the Duchesne River Formation. Permeability is greatly increased where the Uinta Formation is fractured. In most of the area, the formation yields only a few gallons per minute of saline water to wells and springs. In some areas the water has high fluoride and boron concentrations. Locally, flowing wells yield fresh to slightly saline water. In the fluvial facies, particularly where the rocks are fractured, yields are larger.

THE GREEN RIVER FORMATION (1,819'- 5,008)

The Green River Formation is mostly lacustrine shale that contains some limestone, marlstone, and siltstone. The formation includes beds of oil shale and of carbonate evaporite. The Green River interfingers with both the overlying Uinta and the underlying Wasatch Formations, as well as laterally with other formations near the edges of the basin.

The Green River Formation is very low to low permeability except where fractured. Sandstones near oil-shale beds have values of transmissivity from 0.9 to 2.4 sq ft/day. In most of the basin the formation yields only saline or briny water, though in and near the areas of outcrop in the southern part of the basin the water is fresh to slightly saline, and in the area of the outcrop near Strawberry Reservoir the water is fresh where the formation is fractured.

BIRDS NEST MEMBER OF THE GREEN RIVER FORMATION (2,074'-2,336')

The Bird's Nest member (the proposed injection interval) occurs within the Green River formation. The Bird's Nest occurs at an estimated depth between 2,074'-2,336' at the site of the injection well. The Bird's Nest consists of nahcolite nodules set in marlstone overlain by a zone of thin, brittle shale beds, and by a fine-grained homogeneous sandstone.

Geologic Setting (TABLE 2.1)

TABLE 2.1
GEOLOGIC SETTING
HOSS 907-31

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta	0	1,819	< 10,000	Calcerous shale, some limestone, claystone, siltstone, and sandstone.
Green River	1,819	5,008	> 10,000	Mostly lacustrine shale that contains some limestone, marlstone, and siltstone.
Green River: Birds Nest	2,074	2,336	> 10,000	Carbonate.

Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by a confining zone which is free of known open faults or fractures within the Area of Review.

The proposed injection into the Bird's Nest formation is of concern to nearby oil-shale mining interests in the area. In order to establish how the Bird's Nest reacts to injection, annual monitoring will be required as described in Part VI of this Statement of Basis.

TABLE 2.2
INJECTION ZONES
HOSS 907-31

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River: Birds Nest	2,074	2,336	> 10,000	0.649		N/A

* **C - Currently Exempted**
E - Previously Exempted
P - Proposed Exemption
N/A - Not Applicable

Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

The upper confining zone is located between the depths of 1,819' to 2,074'. The upper confining zone consists of interbedded impermeable lacustrine shales, impermeable marlstones and low

porosity siltstones. Density porosities in the siltstones (assuming 2.65 g/cc matrix density) range from 3 to 6%.

The lower confining zone is located between the depths of 2,336' to 2,424'. The lower confining zone consists of interbedded impermeable calcerous shales with minor amounts of low porosity siltstones. The lower confining zone is needed to protect the underlying Mahogany Shale.

TABLE 2.3
CONFINING ZONES
HOSS 907-31

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Green River: Upper Confining Zone	Interbedded lacustrine sand, shale, and carbonate with fluvial sand and shale.	1,819	2,074
Green River: Lower Confining Zone	Interbedded lacustrine sand, shale, and carbonate with fluvial sand and shale.	2,336	2,424

Underground Sources of Drinking Water (USDWs) (TABLE 2.4)

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

The location of USDWs has been predicted from the State of Utah Technical Publication No. 92 entitled "Base of Moderately Saline Ground Water in the Uinta Basin, Utah," U.S. Geologic Survey Open File Report 87-394. This prediction identified the depth of 1,879' below the ground level as the probable base of USDWs in the area, with the USDWs being interspersed above this base. The top of the Bird's Nest injection zone is estimated to be near this depth. Thus, an injection zone water sample will be required prior to receiving authorization to inject to determine whether the Total Dissolved Solids (TDS) of the injection zone is below 10,000 mg/L. If the TDS is below 10,000 mg/L, an aquifer exemption will be required before authorization to inject.

TABLE 2.4
UNDERGROUND SOURCES OF DRINKING WATER (USDW)
HOSS 907-31

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta: USDW (Pub 92)	Sand and shale.	0	1,879	< 10,000

PART III. Well Construction (40 CFR 146.22)

TABLE 3.1
WELL CONSTRUCTION REQUIREMENTS
HOSS 907-31

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Conductor	17.50	13.38	0 - 45	0 - 45
Surface	12.25	9.63	0 - 2,050	0 - 2,050

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

Casing and Cementing (TABLE 3.1)

The well construction plan was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction details for this "new" injection well is shown in TABLE 3.1.

Remedial cementing may be required if the casing cement is shown to be inadequate by cement bond log or other demonstration of Part II (External) mechanical integrity.

The cement bond log required as part of this permit will need to meet the requirements for establishing Part II Mechanical Integrity. For 9-5/8" pipe, guidelines require 80% or greater bonding for 45 continuous feet through the confining zone(s).

In the event that the cement bond log does not meet this threshold, the injection well will be required to perform periodic Temperature Logs to prove confinement of fluids within the injection interval (Part II Mechanical Integrity).

Tubing and Packer

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

Tubing-Casing Annulus (TCA)

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

Monitoring Devices

The permittee will be required to install and maintain wellhead equipment that allows for monitoring pressures and providing access for sampling the injected fluid. Required equipment may include but is not limited to: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) fittings or pressure gauges attached to the injection tubing and the TCA for monitoring the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

TABLE 4.1
AOR AND CORRECTIVE ACTION

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
Chapita Wells Unit 667-6	Producer	No	7,700	0	No
Federal 44-31	Producer	No	8,400	300	No
HOSS 8-31	Producer	No	14,244	4,230	Yes

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

Temperature Logging for Area of Review (AOR) well HOSS 8-31:

Although each of the wells in the area of review is shown to contain a volume of cement necessary to cover the Bird's Nest injection zone, cementing records indicate that problems have occurred for the HOSS 8-31 AOR well while attempting to cement casing strings across the Bird's Nest. For wells designed with surface casing covering the Bird's Nest, a typical cement job involves pumping a volume of cement calculated to circulate cement to the surface. Once primary pumping is complete, pumping ceases and the level of the cement is monitored at the surface. While monitoring, cement typically falls back into the well, presumably into the Bird's Nest. Cement is then added to the annulus at the surface (top job) in several stages until the cement stops falling. Since the cement bond log for the surface casing in this well is not available, additional testing is required in the HOSS 8-31 well to demonstrate the quality of cement behind casing. The cement bond logs for the other wells in the AOR all show adequate cement is present behind casing through the upper and lower confining zones, and no additional testing is required.

In order to verify that these wells are cased and cemented in a manner to prevent fluid movement from the injection formation into USDWs, the HOSS 8-31 Area of Review well is required to undergo annual Temperature logging. Temperature logs will be conducted after the well is shut-in and the temperature in the well is recovering to the background temperature. Review of the logging results will be performed to identify any Bird's Nest fluids which appear to be moving out of the Bird's Nest formation through channels behind casing. The results will be evaluated annually to determine if the requirement can be removed.

If the results of Temperature logging shows any indication of Bird's Nest formation fluids moving out of zone, injection shall be shut-in and corrective action performed to ensure that Bird's Nests fluids will remain within the Bird's Nest and will not migrate into USDWs.

There are no gilsonite veins or drinking water wells in the nearby area.

The logging program requirements are discussed in the Permit in Appendix B - Logging and Testing Requirements, and in Appendix D - Monitoring and Reporting Parameters.

Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

There is no corrective action being required prior to the well receiving authorization to begin injection.

One Area of Review (AOR) well requires demonstration that fluid movement behind pipe is not occurring. This corrective action plan is incorporated into Appendices B and F. If the results of any of the temperature logs show any indication of Bird's Nest formation fluids moving out of zone, the injection well shall be shut-in and corrective action will be required in order to ensure that Bird's Nest fluids remain within the Bird's Nest and do not migrate out of the approved injection zone.

PART V. Well Operation Requirements (40 CFR 146.23)

TABLE 5.1
INJECTION ZONE PRESSURES
HOSS 907-31

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River: Birds Nest	2,074	0.649	430

Approved Injection Fluid

The approved injection fluid is limited to Class II injection well fluids pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Injection of non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes, and vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste, is prohibited.

A random representative sample of the injection water will be collected annually at the sampling tap as described in the Permit under Part II Section A.3(a) and analyzed for hydrocarbon content in addition to the parameters described in Appendix D.

Pursuant to discussions between EPA, BLM, and the operator, a "Bird's Nest" specific water sampling procedure is required to test for the amount and types of hydrocarbons that will be injected into the Bird's Nest zone after treatment. The procedure in Permit Section C. Paragraph 1 describes how all water samples will be analyzed for hydrocarbon content.

This well is NOT approved for commercial brine injection, industrial waste fluid disposal, or injection of hazardous waste as defined by CFR 40 Part 261. The source of the injected fluids is limited to oil and gas production wells operated by the permittee.

Injection Pressure Limitation

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

Similar injection wells completed into the Bird's Nest have been unable to establish a fracture pressure. These wells initially take fluid on a vacuum, and pressure buildup within the Bird's Nest does not occur during the step-rate test. For that reason, the initial injection pressure is set at 430 psi (equivalent to a formation fracture gradient of 0.649 psi/ft). The 0.649 psi/ft, in comparison with other well-known formation fracture pressures in the Uinta basin, is sufficiently low to ensure that a

430 psi injection pressure is not likely to cause fractures within the Bird's Nest.

Since these wells initially operate on a vacuum, little is known about the Bird's Nest as an injection formation. The operator is required to monitor the pressure in the Bird's Nest annually by recording a stabilized static fluid level.

The results of this fluid level monitoring shall be reported to the Director as part of the required Annual Report.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit.

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

FP = formation fracture pressure (measured at surface)
fg = fracture gradient (from submitted data or tests)
sg = specific gravity (of injected fluid)
d = depth to top of injection zone (or top perforation)

Injection Volume Limitation

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

Mechanical Integrity (40 CFR 146.8)

An injection well has mechanical integrity if:

1. there is no significant leak in the casing, tubing, or packer (Part I); and
2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependent upon well-specific conditions as explained below.

PART VI. Monitoring, Recordkeeping and Reporting Requirements

Injection Well Monitoring Program

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

The operator will also collect a water sample from the injection zone and have a background analysis for hydrocarbon content prior to receiving authorization to inject.

Possible conflict with oil-shale mining in the area:

The Bird's Nest member of the Green River formation, proposed for injection, lies approximately 300 ft above the top of the Mahogany Shale formation. The Mahogany Shale is being proposed for oil-shale development in the vicinity of this injection well. Concerns have been raised regarding injection into the Bird's Nest and the effect of that injection on proposed oil-shale mining. Of primary concern is the proximity of the Bird's Nest to the Mahogany shale, and the possibility of the injection increasing water intrusion into the mine works.

Research conducted on this topic may be found in the report, "Final Environmental Baseline Report - Federal Prototype Oil Shale Leasing Program, Tracts U-a and U-b Utah, White River Shale Project," VTN Colorado, Inc., October 1977. This report, conducted in part to identify potential problems from adjacent aquifers on the proposed mining project, concludes that the "proposed mining program is not expected to create any interconnection between the bird's nest aquifer and the Douglas Creek member nor is it expected to create vertical flow from either aquifer into the mine workings. However, because of the lack of conclusive proof of the separation of aquifers, it would be advantageous to design an intensified monitoring program in the event that large flows are encountered in the workings."

"Providing that there are no subflows from the bird's nest aquifer into the workings, the only effect of development upon the movement of ground water and water level fluctuations will be during the sinking of the mine shaft through the bird's nest aquifer. Inflow to the shaft will be stopped as soon as practicable by cementing and casing as stipulated in the DDP. Inflows to the shaft will be temporary, as will be the effect upon water levels. Specific monitoring should not be necessary for this aspect of development."

Due to the high permeabilities found in the Bird's Nest, the injection wells operate on a vacuum during the early stages of the injection project life. Although each permit requires a well test designed to determine fracture pressures in the Bird's Nest, tests conducted on nearby Bird's Nest injection wells have been unable to build up pressure in the Bird's Nest to a degree needed to determine a fracture pressure.

In order to establish how the Bird's Nest reacts to injection, permit conditions require the injection well to undergo annual fluid level determinations. During these tests, the injection well is shut-in and the static fluid level allowed to stabilize. After the fluid level has stabilized, the static fluid level is measured, cumulative injected volume determined, and the fluid in the well is sampled and analyzed for specific gravity in order to determine the pressure in the Bird's Nest. This information will be tracked year-to-year in order to show the buildup of pressure in the Bird's Nest and the relationship between that pressure and the cumulative volume of fluid injected into the disposal well.

Annually, and in conjunction with the Annual Report to the Director, the results of this monitoring shall be reported to the Director. This report shall include the results of the annual fluid level monitoring in order to determine how the Bird's Nest injection interval responds to the injected volumes.

Annual Temperature Logging for one Area of Review well is also required, as described in

Appendix F of this permit.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, annulus pressure, monthly injection flow rate and cumulative fluid volume. This information is required to be reported annually as part of the Annual Report to the Director.

PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)

Plugging and Abandonment Plan

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

PART VIII. Financial Responsibility (40 CFR 144.52)

Demonstration of Financial Responsibility

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Evidence of continuing financial responsibility is required to be submitted to the Director annually.

Financial Statement, received May 28, 2008

Evidence of continuing financial responsibility is required to be submitted to the Director annually.